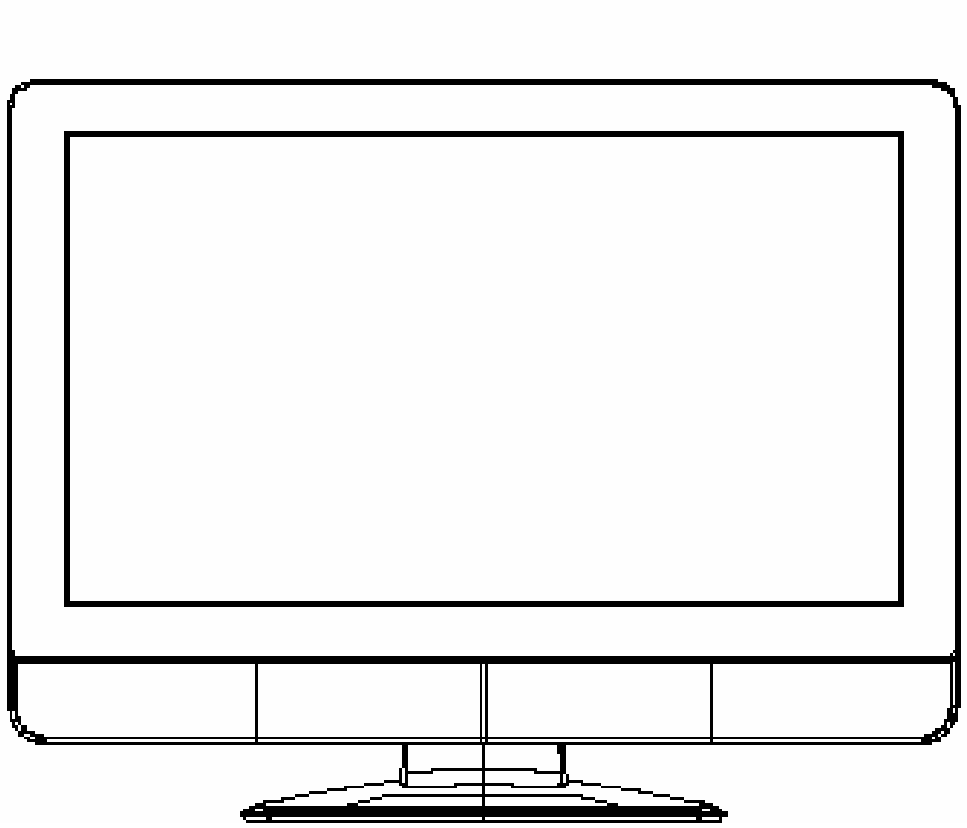
Service Manual



Model #: VIZIO VX37L HDTV

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Top Confidential

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Appendix

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FCC INFORMATION
This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause unacceptable interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures -- reorient or relocate the receiving antenna; increase the separation between equipment and receiver; or connect the into an outlet on a circuit different from that to which the receiver is connected.

FCC WARNING
To assure continued FCC compliance, the user must use a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, any unauthorized changes or modifications to Amtrak products will void the user’s authority to operate this device. Thus VINC Will not be held responsible for the product and its safety.

CE CERTIFICATION
This device complies with the requirements of the EEC directive 89/336/EEC with regard to “Electromagnetic compatibility.”

SAFETY CAUTION
Use a power cable that is properly grounded. Always use the AC cords as follows – USA (UL); Canada (CSA); Germany (VDE); Switzerland (SEV); Britain (BASEC/BS); Japan (Electric Appliance Control Act); or an AC cord that meets the local safety standards.

Chapter 1 Features

1. Built in TV channel selector for TV viewing

2. Simulatnueous display of PC and TV images

3. Connectable to PC's analog RGB port

4. Built in S-video, HDTV, composite video, HDMI and TV out

5. Built in auto adjust function for automatic adjument of screen display

6. Smoothing function enables display of smooth texts and graphics even if image withresolution lower than 1366x768 is magnified

7. Picture In Picture (PIP) funtion to show TV or VCR images

8. Power saving to reduce consumption power too less than 3W

9. On Screen Display: user can define display mode (i.e. color, brightness, contrast, sharpness, backlight), sound setting, PIP, TV channel program, aspect and gamma or reset all setting.

Chapter 2 Specification

1. LCD CHARACTERISTICS

Type: LPL LC370WX1-SLA1
Size: 3702inch
Display Size: 37.02 inches (940.3mm) diagonal
Outline Dimension: 877.0 mm (H) x 516.8 mm (V) x 55.5 mm (D) (Typ.)
Pixel Pitch: 0.200mm x 0.600mm x RGB
Pixel Format: 1366 horiz. By 768 vert. Pixels RGB strip arrangement
Contrast ratio: 1.CR : 1000(Typ) 2. CR WITH AI : 2000(Typ)
Luminance, White: 500 cd/m2 (Typ)
Display Operating Mode: normally Black
Surface Treatment: Hard Coating (3H) ,Anti-glare treatment of the front polarizer.

2. OPTICAL CHARACTERISTICS

Viewing Angle (CR>10)
Left: 89°typ.
Right: 89°typ.
Top: 89°typ.
Bottom: 89°typ.

3. SIGNAL (Refer to the Timing Chart)

Sync Signal
1) Type: TMDS
2) Input Voltage Level: 90~240 Vac, 50/ 60 Hz

4.Input Connectors

RJ11, D-SUB15PIN (MINI, 3rows), Headphone, HDMIX2, RCAX3 (component), RCAX2 (AUDIO in), RCAX3 (composite), RCAX2 (AUDIO in), S-Video, Tuner.

5. POWER SUPPLY

Power Consumption: 280W MAX
Power OFF: to less than 3W MAX

6.Speaker

Output 10W (max) X2

7. ENVIRONMENT

5-1. Operating Temperature: 5c~35c (Ambient)

5-2. Operating Humidity: Ta= 35 °C, 90%RH (Non-condensing)

5-3. Operating Altitude: 0 - 14,000 feet (4267.2m)(Non-Operating)

8. DIMENSIONS (Physical dimension)

Width: 800 mm. +/- 20 mm

Depth: 1060 mm +/- 20 mm

Height: 360 mm +/- 20 mm

9. WEIGHT (Physical weight)

a. Net: 19.1+/-0.5kgs

b. Gross: 24.6+/-0.5kgsn

9-1. MOUNTING PRECAUTIONS

(1) You must mount a module using holes arranged in four corners or four sides.

(2) You should consider the mounting structure so that uneven force (ex. Twisted stress) is not applied to the module. And the case on which a module is mounted should have sufficient strength so that external force is not transmitted directly to the module.

(3) Please attach the surface transparent protective plate to the surface in order to protect the polarizer.
Transparent protective plate should have sufficient strength in order to the resist external force.

(4) You should adopt radiation structure to satisfy the temperature specification.

(5) Acetic acid type and chlorine type materials for the cover case are not desirable because the former generates corrosive gas of attacking the polarizer at high temperature and the latter causes circuit break by electro-chemical reaction.

(6) Do not touch, push or rub the exposed polarizes with glass, tweezers or anything harder than HB pencil lead. And please do not rub with dust clothes with chemical treatment.
Do not touch the surface of polarizer for bare hand or greasy cloth.(Some cosmetics are detrimental to the polarizer.)

(7) When the surface becomes dusty, please wipe gently with absorbent cotton or other soft materials like chamois soaks with petroleum benzene. Normal-hexane is recommended for cleaning the adhesives used to attach front / rear polarizers. Do not use acetone, toluene and alcohol because they cause chemical damage to the polarizer.
(8) Wipe off saliva or water drops as soon as possible. Their long time contact with polarizer causes deformations and color fading.
(9) Do not open the case because inside circuits do not have sufficient strength.

9-2. OPERATING PRECAUTIONS

(1) The spike noise causes the mis-operation of circuits. It should be lower than following voltage :
V=±200mV(Over and under shoot voltage)
(2) Response time depends on the temperature. (In lower temperature, it becomes longer.)
(3) Brightness depends on the temperature. (In lower temperature, it becomes lower.)And in lower temperature, response time (required time that brightness is stable after turned on) becomes longer.
(4) Be careful for condensation at sudden temperature change. Condensation makes damage to polarizer or electrical contacted parts. And after fading condensation, smear or spot will occur.
(5) When fixed patterns are displayed for a long time, remnant image is likely to occur.
(6) Module has high frequency circuits. System manufacturers shall do sufficient suppression to the electromagnetic interference. Grounding and shielding methods may be important to minimize the interference.

9-3. HANDLING PRECAUTIONS FOR PROTECTION

(1) The protection film is attached to the bezel with a small masking tape. When the protection film is peeled off, static electricity is generated between the film and polarizer. This should be peeled off slowly and carefully by people who are electrically grounded and with well ion-blown equipment or in such a condition, etc.

(2) When the module with protection film attached is stored for a long time, sometimes there remains a very small amount of glue still on the bezel after the protection film is peeled off.

(3) You can remove the glue easily. When the glue remains on the bezel surface or its vestige is recognized, please wipe them off with absorbent cotton waste or other soft material like chamois soaked with normal-hexane.

Chapter 3 On Screen Display

Main unit button

Power

MENU

CH ▲

CH ▼

VOL +

VOL -

Input

TV Source

A. Picture Adjust：

a. Picture Mode (Standard/Movie /Game / Custom)

b. Backlight (0~100)

c. Contrast (0~100)

d. Brightness (0~100)

e. Color (saturation)(0~100)

f. Tint (hue) (0~100)

g. Sharpness (0~7)

h. Color Temperature (Cool/Normal/Warm/Custom)

B. Audio Adjust：

a. Volume (0~100)

b. Bass (0~100)

c. Treble (0~100)

d. Balance (0~100)

e. Surround (ON/OFF)

f. Speakers (ON/OFF)

C. Special Features：

a. Language (English/Français/Espaňol)

b. Sleep Timer (OFF/30Min/60Min/90Min/120Min)

c. Analog CC (OFF/CC1~4/TT1~4)

d. Digital CC (OFF/CC1~4/Service1~6)

e. Digital CC Style

f. PIP Position (TL/TC/TR/ML/MR/BL/BC/BR)

g. Rest All Setting

D. TV Tuner Setup：

a. Tuner Mode (Cable/Air)

b. Auto Search

c. Skip Channel

E. Parental Control：

a. Parental Lock Enable (ON/OFF)

b. TV Rating

c. Move Rating

d. Block Unrated TV (NO/Yes)

e. Access Code Edit

RGB Mode

A. Picture Adjust：

a. Auto Adjust

b. Backlight (0~100)

c. Contrast (0~100)

d. Brightness (0~100)

e. Color Temperature (9300/6300/Custom)

f. Tint (0~100)

g. H-Size (0~255)

h. Horizontal Shift (0~63)

i. Fine Tune (0~31)

B. Audio Adjust：

a. Volume (0~100)

b. Bass (0~100)

c. Treble (0~100)

d. Balance (0~100)

e. Surround (ON/OFF)

f. Speakers (ON/OFF)

C. Special Features：

a. Language (English/Français/Espaňol)

b. Sleep Timer (OFF/30Min/60Min/90Min/120Min)

c. PIP Position (TL/TC/TR/ML/MR/BL/BC/BR)

d. Rest All Setting

AV COMPONENT MODE

A. Picture Adjust：

a. Picture Mode (Standard/Movie /Game / Custom)

b. Backlight (0~100)

c. Contrast (0~100)

d. Brightness (0~100)

e. Color (saturation)(0~100)

f. Tint (hue) (0~100)

g. Sharpness (0~7)

h. Color Temperature (Cool/Normal/Warm/Custom)

B. Audio Adjust：

a. Volume (0~100)

b. Bass (0~100)

c. Treble (0~100)

d. Balance (0~100)

e. Surround (ON/OFF)

f. Speakers (ON/OFF)

C. Special Features：

a. Language (English/Français/Espaňol)

b. Sleep Timer (OFF/30Min/60Min/90Min/120Min)

c. Analog CC (OFF/CC1~4/TT1~4)

d. PIP Position (TL/TC/TR/ML/MR/BL/BC/BR)

e. Rest All Setting

D. Parental Control：

a. Parental Lock Enable (ON/OFF)

b. TV Rating

c. Move Rating

d. Block Unrated TV (NO/Yes)

e. Access Code Edit

HDMI MODE：

A. Picture Adjust：

a. Picture Mode (Standard/Movie /Game / Custom)

b. Backlight (0~100)

c. Contrast (0~100)

d. Brightness (0~100)

e. Color (saturation)(0~100)

f. Tint (hue) (0~100)

g. Sharpness (0~7)

h. Color Temperature (Cool/Normal/Warm/Custom)

B. Audio Adjust：

a. Volume (0~100)

b. Bass (0~100)

c. Treble (0~100)

d. Balance (0~100)

e. Surround (ON/OFF)

f. Speakers (ON/OFF)

C. Special Features：

a. Language (English/Français/Espaňol)

b. Sleep Timer (OFF/30Min/60Min/90Min/120Min)

c. PIP Position (TL/TC/TR/ML/MR/BL/BC/BR)

d. Rest All Setting

Chapter4 Factory preset timings

This timing chart is already preset for the TFT LCD analog & digital display monitors.

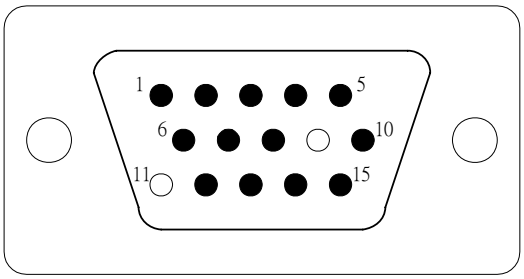
Resolution	Refresh rate	Horizontal Frequency	Vertical Frequency	Horizontal Polarity	Vertical Polarity	Pixel Rate
640x480	60Hz	31.5kHz	59.94Hz	N	N	25.175
640x480	75Hz	37.5kHz	75.00Hz	N	N	31.500
800X600	60Hz	37.9kHz	60.317Hz	P	P	40.000
800x600	75Hz	46.9kHz	75.00Hz	P	P	49.500
800X600	85Hz	53.7kHz	85.06Hz	P	P	56.250
1024x768	60Hz	48.4kHz	60.01Hz	N	N	65.000
1024X768	75Hz	60.0kHz	75.03Hz	P	P	78.750
720x400	70Hz	31.46kHz	70.08Hz	N	P	28.320
1366X768	60	47.7KHZ	60.00HZ	P	N	85.500

Remark: P: positive N: negative

Chapter5 Pin Assignment

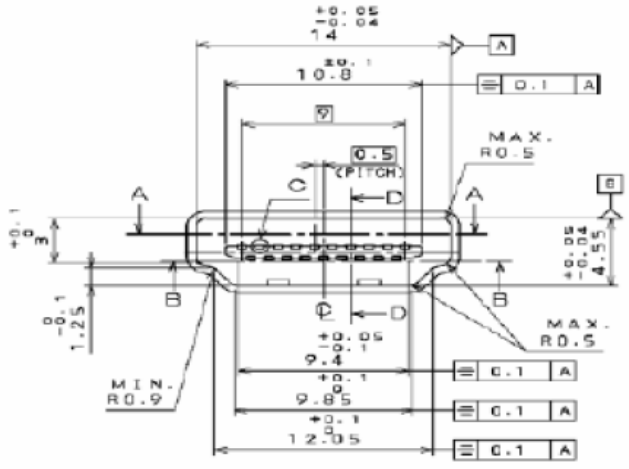
The TFT LCD analog display monitors use a 15 Pin Mini D-Sub connector as video input source.

Pin	Description
1	Red
2	Green
3	Blue
4	Ground
5	Ground
6	R-Ground
7	G-Ground
8	B-Ground
9	+5V for DDC
10	Ground
11	No Connection
12	(SDA)
13	H-Sync (Composite Sync)
14	V-Sync
15	(SCL)



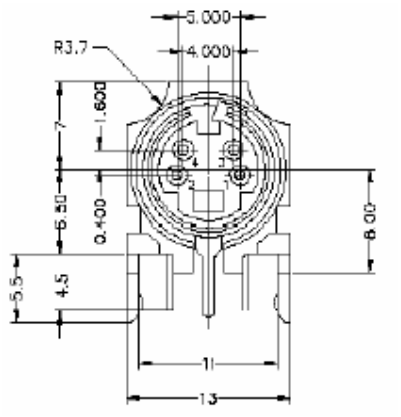
HDMI CONNECT PIN ASSIGNMENT

PIN	SIGNAL ASSIGNMENT
1	TMDS Data2+
2	TMDS Data2 Shield
3	TMDS Data2-
4	TMDS Data1+
5	TMDS Data1 Shield
6	TMDS Data1-
7	TMDS Data0+
8	TMDS Data0 Shield
9	TMDS Data0-
10	TMDS Clock+
11	TMDS Clock Shield
12	TMDS Clock-
13	CEC
14	Reserved (N.C on device)
15	SCL
16	SDA
17	DDC/CEC Ground
18	+5V Power
19	Hot Plug Detect



Four-Pin mini DIN S-Video Connector

a. Pin Assignment



b. Signal Level Video (Y): Analog 0.1Vp-p/75Ω

Video (C): Analog 0.286p-p/75

Sync (H+V): 0.3V below Video (Y)

c. Frequency H: 15.734KHz V: 60Hz (NTSC)

Signal Level Video (Y) : Analog 0.1Vp-p/75Ω

Video (C) : Analog 0.286p-p/75Ω

Sync (H+V): 0.3V below Video (Y)

Frequency H: 15.734Khz V: 60HZ (NTSC)

F-Type TV RF connector

a. Signal Level 60dBμV typical

b. System NTSC

c. Frequency 55~801MHz (NTSC)

PC connector 15 pin male D-sub connector

a. Pin Assignment Refer to Section 2.3.10

b. Signal Level Video (R, G, B): Analog 0.7Vp-p/75Ω

Sync (H, V): TTL level

RGB Signal:

a. Sync Type TTL (Separate / Composite) or Sync. On Green

b. Sync polarity Positive or Negative

c. Video Amplitude RGB: 0.7Vp-p

d. Frequency H: support to 30K~70KHz

V: support to 50~85Hz

Pixel Clock: support to 110MHz

HDMI Signal (HDMI):

a. Pin Assignment Refer to HDNI Pin Assignment

b. Type A

c. Polarity Positive or Negative

d. Frequency

H: 15.734KHz V: 60Hz (NTSC-480i)

H: 31KHz V: 60Hz (NTSC-480p)

H: 45KHz V: 60Hz (NTSC-720p)

H: 33KHz V: 60Hz (NTSC-1080i)

Component signal (Component 1 and Component 2)

Component 1

a. Frequency H: 15.734KHz V: 60Hz (NTSC-480i)

H: 31KHz V: 60Hz (NTSC-480p)

H: 45KHz V: 60Hz (NTSC-720p)

H: 33KHz V: 60Hz (NTSC-1080i)

b. Signal level Y: 1Vp-p Pb: ±0.350Vp-p Pr: ±0.350Vp-p

c. Impedance 75Ω

Component 2

a. Frequency H: 15.734KHz V: 60Hz (NTSC-480i)

H: 31KHz V: 60Hz (NTSC-480p)

H: 45KHz V: 60Hz (NTSC-720p)

H: 33KHz V: 60Hz (NTSC-1080i)

b. Signal level Y: 1Vp-p Pb: ±0.350Vp-p Pr: ±0.350Vp-p

c. Impedance 75Ω

Chapter6 Main Board I/o Connections

J6 CONNECTION (TOP→BOTTOM)

Pin	Description
1	“+5V”
2	“+3.3V”
3	“ADCKEY”
4	“LED”
5	“PWR KEY”
6	“GND”
7	“GND”
8	“IR”

J7 CONNECTION (TOP→BOTTOM)

Pin	Description
1	“POWRSW”
2	“+12V”
3	“+12V”
4	“+12V”
5	“GND”
6	“GND”
7	“GND”
8	“GND”
9	“GND”
10	“+5V”
11	“+5V”
12	+5V
13	“PWM”
14	“BL ON/OFF”

Chapter 7 Theory of Circuit Operation

The operation of D-SUB 15pin route

The D-SUB 15pin is input analog signal to the MTK8202 transfer A/D converter then generates the vertical and horizontal timing signals for display device.

The operation of HDMII CON route

The HDMI 1&2 CON is input digital signal to the PI3HDMI412FT switch output signal is process to the MT8293. Then transfer to the MTK8202, the MTK8202 generates the vertical and horizontal timing signals for display device.

The operation of HDTV & Component route

HDTV & Component signal is input to the MTK8202 then MTK8202 generates the vertical and horizontal timing signals for display device.

The operation of Video 1,2,3 & S-Video route

The Video 1,2 and S-Video signal is transmission signal to the MTK8202 then MTK8202 generates the vertical and horizontal timing signals for display device.

The operation of TV route

TV signal is processes to the tuner and output to MTK8202 then MTK8202 generates the vertical and horizontal timing signals for display device. Audio is processes to the tuner output to SIF circuit and output to MTK8202.Then MTK8202 process to wm8776 and output to TDA8946J transfer to speaker

The operation of DTV route

DTV signal is processes to the tuner and transmission to MT5112 and output signal to MT5351 then MT5351 output to MT8202 generates the vertical and horizontal timing signals for display device.

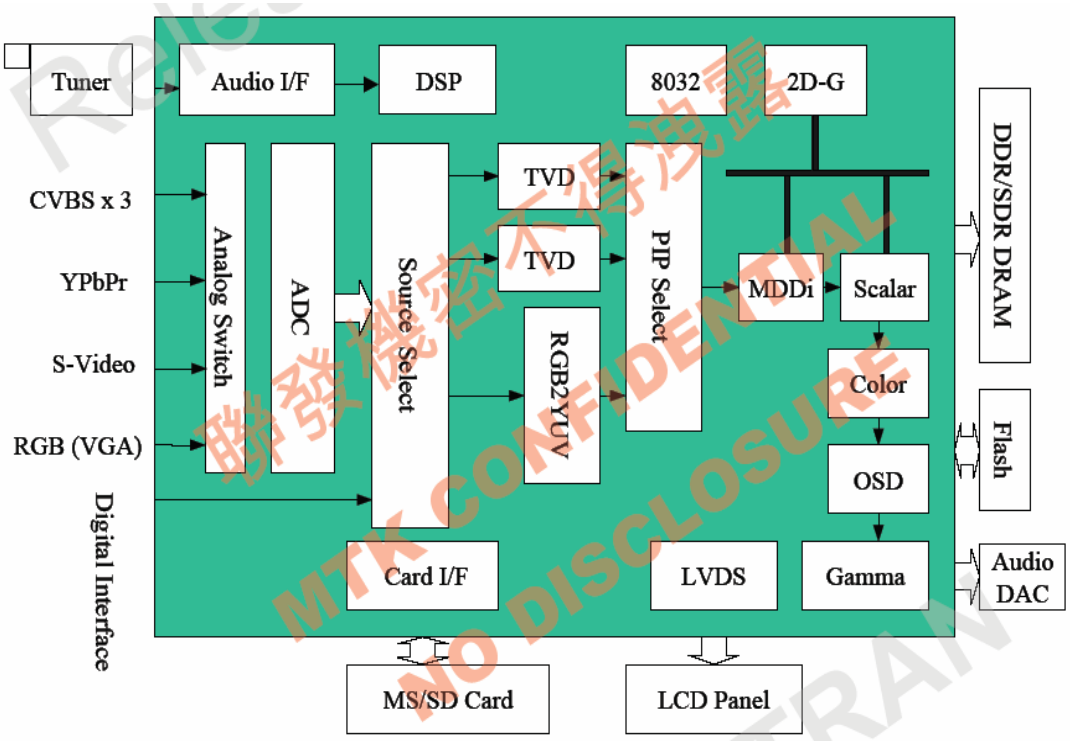
The operation of keypad

There are 7 keys to control and select the function of L42 and also has one LED to indicate the status of operation. They are “Power, ▼▲, + -, Input, OSD”.

MT8202 Application

MT8202 is a highly integrated video and audio single chip processor for emerging HDTV-Ready LCD TV. It includes one 3D/2D TV Decoder recovering the best image from CVBS, and in addition, its analog input also support popular S-Video, Component, VGA video source. On-chip advanced motion adaptive de-interlacer (MDDitm) converts accordingly the interlace video into smooth non-flicking progressive motion pictures. With on-chip advanced 2D Graphic processor,MT8202 provides customers with high quality UI adding significant end product value. Flexible scalar provides wide adoption to various LCD panel for different video sources. Its on-chip audio processor decodes whole world standard audio signals from tuner with lip sync control, delivering high quality post-processed sound effect to customers. On-chip microprocessor and reference FW reduces the system BOM and shortens the schedule of UI design by high-level C program. With truly SOC design, MT8202 offers our customers the real cost-effective high performance HDTV-ready solution.

BOLOCK DIAGRAM



1. Video input

a. Input Multiplexing

1.component X2

2.composite X2

3.s-videoX1

4.HDMI X2

5.VGA X1

6.RF&DTV X1

b. Input formats:

1.support HDTV 480i/480p/720p/1080p

2.support Y/C signal 1VP-P/75Ω

3.support Y/C signal 1VP-P/75Ω

4.support 480i/408p/720p/1080i/1080p

5.support VGA input up to 1366x168@60HZ

6.support RF NTSC system Frequency 55~801MHZ;DTV 480i/480p/720p/1080p

2. Decoder

TVD

1.Single 2nd generation TV decoder

2.Automatic TV standard detection supporting NTSC, NTSC-4.43, PAL (B, G, D, H, M, N, I, Nc), PAL (Nc), PAL, SECAM

3.Enhanced 2nd generation NTSC/PAL Motion Adaptive 3D comb filter

4.Motion Adaptive 3D Noise Reduction

5.Embedded VBI decoder for Closed-Caption/XDS/ Teletext/WSS/VPS

6.Supporting Macro vision detection

YPbPr/Scart/D-connector

1.Supporting HDTV 480i/480p/576i/576p/720p/1080i input

2.Smart detection on Scart function for European region

3.Smart detection on D-connector for Japan region

4.Supporting SCART RGB inputs mixed with composite signal by adjustable horizontal delay

VGA

1.Supporting various VGA input timings up to SXGA (1280x1024@75Hz).

2.Supporting Separate/Composite/SOG sync types

Digital port

1.1 digital port supporting DVI 24-bit RGB or CCIR-656/601 digital video input format

2.1 additional 8 bit digital port for ITU656 video format

VBI

1.Dual VBI decoders for the application of V-Chip/Closed-Caption/XDS/ Teletext/WSS/VPS

2.Supporting external VBI decoder by YPrPb input

3.VBI decoder up to 1000 pages Teletext.

3. Support Formats:

Support NTSC, NTSC-4.43

Automatic Luma / Chroma gain control

Automatic TV standard detection

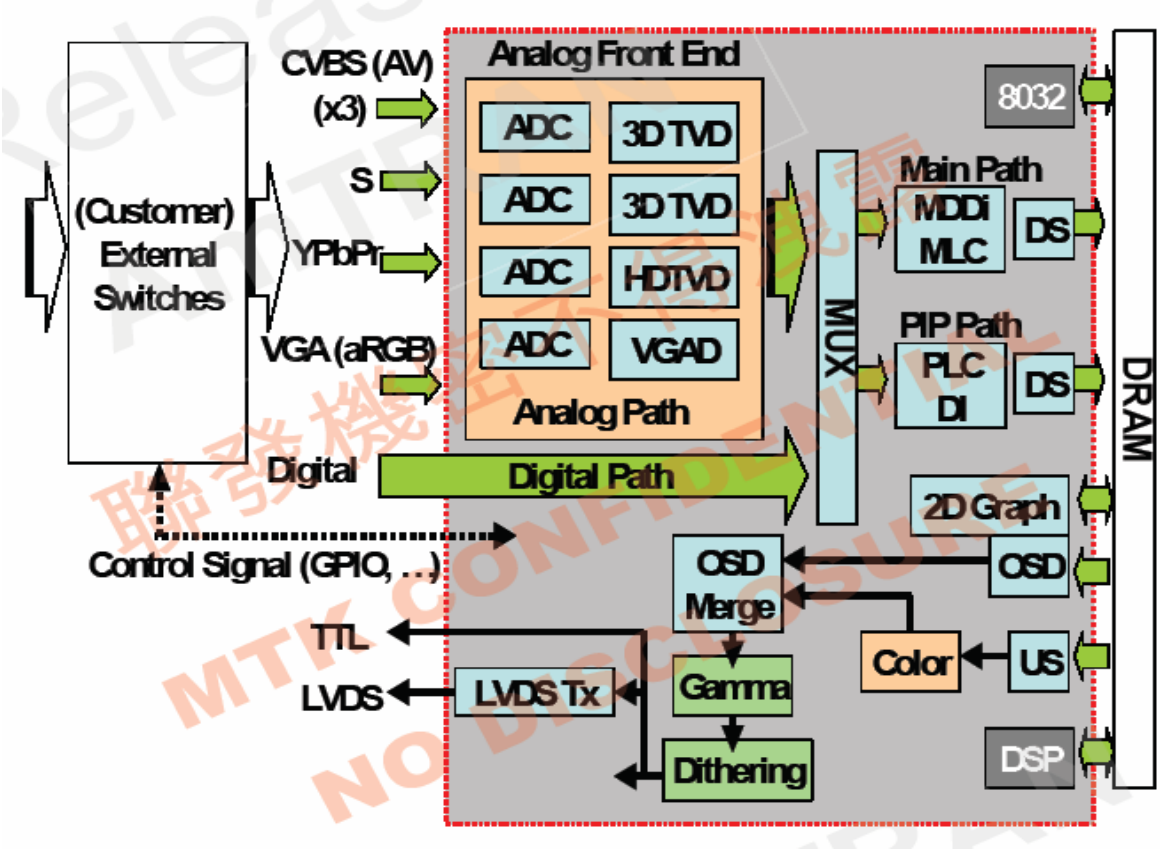
NTSC Motion Adaptive 3D comb filter

Motion adaptive 3D Noise Reduction

VBI decoder for closed-caption/XDS/Teletext/WSS/VPS

Macro vision detection

BOLOCK DIAGRAM



4. 2D-Graphic/OSD processor

Embedded two backend RGB domain OSD planes and one YUV domain OSD plane. to support Main/PIP Teletext/Close-caption functions together with setup menu

1.Supporting alpha blending among these two planes and video

2.Supporting Text/Bitmap decoder

3.Supporting line/rectangle/gradient fill

4.Supporting bitblt

5.Supporting color Key function

6.Supporting Clip Mask

7.65535/256/16/4/2-color bitmap format OSD,

8.Automatic vertical scrolling of OSD image

9.Supporting OSD mirror and upside down

5. Microprocessor interface

When power is supplied and power key is pressed then the rest circuit lets Reset to low state that will reset the MTK8202 to initial state. After that the Reset will transits to high state and the MTK8202 start to work that microprocessor executes the programs and configures the internal registers. The execution speed of CPU is 162 MHz.

1. The I/O ports are configured as follows：

Pin name	Function	Type	Description
AD17	PWM	Output	Backlight Adjust
R3	GPIO2	Output	Panel on/off
V1	GPIO7	Output	System power
Y2	GPIO16	Output	LVDS on/off
R4	GPIO3	Output	ATSC POW on/off
AD22	IOSCL	Input / Output	SDA
AV22	IOSDA	Input / Output	SCL
W3	GPIO13	Output	HDMI Switch Select
Y4	GPIO_18	Output	MT8293 Reset
W4	GPIO_14	Output	MT8293 acknowledge to player
B19	ADC_IN0	Input	Key ADC detection
L4	IR	Input	IR Receiver
Y1	GPIO_15	Output	SYSTEM EEPROM Read / Write
T2	GPIO_23	Output	LED Backlight
L2	RESETn	Input	MT8202 RESET
R2	GPIO_1	Output	DTV & HDMI Select PIN
T4	GPIO_4	Output	DTV & ATV Select PIN

2. PIP/POP HARDWARE LIMITION:

MAIM/PIP TABLE (8202)							
PIP / MAIN	TV	ATSC (DTV)	AV1	AV2/S-VIDEO	COMPONENT 1&2	HDMI 1&2	PC
TV		X	X	X	O	O	O
ATSC (DTV)	X		X	X	O	X	O
AV1	X	X		X	O	O	O
AV2/ S-VIDEO	X	X	X		O	O	O
COMPONENT 1&2	O	O	O	O		O	X
HDMI 1&2	O	X	O	O	O		O
PC	O	O	O	O	X	O	

6. Video processor

1.Color Management

Fully 10-bit processing to enhance the video quality

Advanced flesh tone and multiple-color enhancement. (For skin, sky, and grass…)

Gamma/anti-Gamma correction

Advanced Color Transient Improvement (CTI)

Saturation/hue adjustment

2.Contrast/Brightness/Sharpness Management

Sharpness and DLTI/DCTI

Brightness and contrast adjustment

Black level extender

White peak level limiter

Adaptive Luma/Chroma management

3.De-interlacing

2nd generation advanced Motion adaptive de-interlacing

Automatic detect film or video source

3:2/2:2 pull down source detection

Main/PIP 2 independent de-interlacing processor

4.Scaling

2nd generation high resolution arbitrary ratio vertical/horizontal scaling of video, from 1/32X to 32X

Advanced linear and non-linear Panorama scaling

Programmable Zoom viewer

Picture-in-Picture (PIP)

Picture-Out-Picture (POP)

5.Display

Advanced dithering processing for LCD display with 6/8/10 bit output

10bit gamma correction

Supporting alpha blending for Video and two OSD planes

Frame rate conversion

6.Seamless performance comparing demonstration function

Support Left/Right video processing comparing function without additional resources (DRAM…) for customers' demonstration

All the video functions (De-interlace/3D comb/NR/Flesh tone/CTI) can be included

7. DRAM Usage

1.For features of 8202, Dual for enhance features support, and single 8x16 DDR for simple function support Lists are the comparison chart between function support lists of (2xDDR) and (1xDDR)

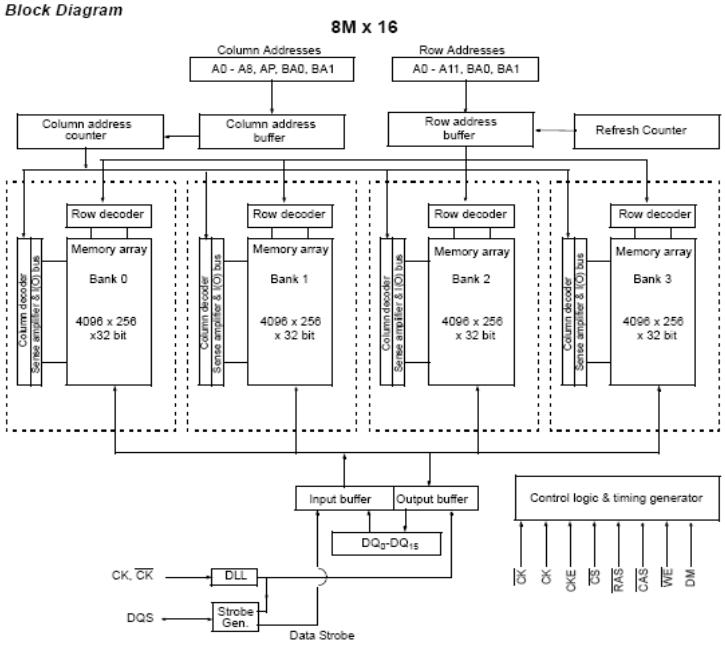
	DDR*1(16MB)	DDR*2(32MB)
NR	Y	Y
3D-Comb	Y	Y
MDDi	*480i/576i	1080i
PIP	*Y	Y
POP	*Y	Y
Display	1024x768	1366x768 1280x1024 1440x900

2.For single DDR, 8202 only support 1080i bob mode de-interlacing. (Non-3D de interlace)

3.With single DDR, it is suggested not to support PIP/POP features. Due to DDR Bandwidth limitation on PIP/POP when single DDR.

8.DDR SDRAM (V58C2128164SBI5) Application

Block Diagram



Pin description

Signal Pin Description

Pin	Type	Signal	Polarity	Function
CK $\overline{CK}$	Input	Pulse	Positive Edge	The system clock input. All inputs except DQs and DMs are sampled on the rising edge of CK.
CKE	Input	Level	Active High	Activates the CK signal when high and deactivates the CK signal when low, thereby initiates either the Power Down mode, or the Self Refresh mode.
$\overline{CS}$	Input	Pulse	Active Low	$\overline{CS}$ enables the command decoder when low and disables the command decoder when high. When the command decoder is disabled, new commands are ignored but previous operations continue.
$\overline{RAS}$, $\overline{CAS}$ $\overline{WE}$	Input	Pulse	Active Low	When sampled at the positive rising edge of the clock, $\overline{CAS}$, $\overline{RAS}$, and $\overline{WE}$ define the command to be executed by the SDRAM.
DQS	Input/ Output	Pulse	Active High	Active on both edges for data input and output. Center aligned to input data Edge aligned to output data
A0 - A11	Input	Level	—	During a Bank Activate command cycle, A0-A11 defines the row address (RA0-RA11) when sampled at the rising clock edge. During a Read or Write command cycle, A0-An defines the column address (CA0-CAn) when sampled at the rising clock edge.CAn depends on the SDRAM organization: 32M x 4 DDR CAn = CA9, A11 16M x 8 DDR CAn = CA9 8M x 16 DDR CAn = CA8 In addition to the column address, A10(=AP) is used to invoke autoprecharge operation at the end of the burst read or write cycle. If A10 is high, autoprecharge is selected and BA0, BA1 defines the bank to be precharged. If A10 is low, autoprecharge is disabled. During a Precharge command cycle, A10(=AP) is used in conjunction with BA0 and BA1 to control which bank(s) to precharge. If A10 is high, all four banks will be precharged simultaneously regardless of state of BA0 and BA1.
BA0, BA1	Input	Level	—	Selects which bank is to be active.
DQx	Input/ Output	Level	—	Data Input/Output pins operate in the same manner as on conventional DRAMs.
DM, LDM, UDM	Input	Pulse	Active High	In Write mode, DM has a latency of zero and operates as a word mask by allowing input data to be written if it is low but blocks the write operation if is high for x 16 LDM corresponds to data on DQ0-DQ7, UDM corresponds to data on DQ8-DQ15.
VDD, VSS	Supply			Power and ground for the input buffers and the core logic.
VDDQ VSSQ	Supply	—	—	Isolated power supply and ground for the output buffers to provide improved noise immunity.
VREF	Input	Level	—	SSTL Reference Voltage for Inputs

Command Truth Table

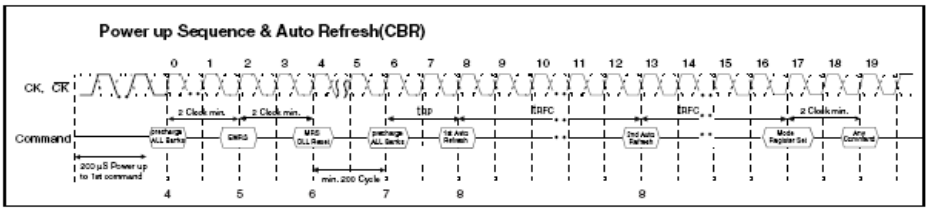
Command		CKEn-1	CKEn	CS	RAS	CAS	WE	ADDR	A10/AP	BA	Note
Mode Register Set		H	X	L	L	L	L	OP code			1,2
Extended Mode Register Set		H	X	L	L	L	L	OP code			1,2
Device Deselect		H	X	H	X	X	X	X			1
No Operation				L	H	H	H				
Bank Active		H	X	L	L	H	H	RA		V	1
Read		H	X	L	H	L	H	CA	L	V	1
Read with Autoprecharge									H		1,3
Write		H	X	L	H	L	L	CA	L	V	1
Write with Autoprecharge									H		1,4
Precharge All Banks		H	X	L	L	H	L	X	H	X	1,5
Precharge selected Bank									L	V	1
Read Burst Stop		H	X	L	H	H	L	X			1
Auto Refresh		H	H	L	L	L	H	X			1
Self Refresh	Entry	H	L	L	L	L	H	X			1
	Exit	L	H	H	X	X	X				1
				L	H	H	H				
Precharge Power Down Mode	Entry	H	L	H	X	X	X	X			1
				L	H	H	H				1
	Exit	L	H	H	X	X	X				1
				L	H	H	H				1
Active Power Down Mode	Entry	H	L	H	X	X	X	X			1
				L	V	V	V				1
	Exit	L	H	X							1

(H=Logic High Level, L=Logic Low Level, X=Don't Care, V=Valid Data Input, OP Code=Operand Code, NOP=No Operation)

1. Power-Up *Functional Description*

The following sequence is required for POWER UP.

1. Apply power and attempt to maintain CKE at a low state (all other inputs may be undefined.)
   - Apply VDD before or at the same time as VDDQ.
   - Apply VDDQ before or at the same time as VTT & Vref.
2. Start clock and maintain stable condition for a minimum of 200us.
3. The minimum of 200us after stable power and clock (CLK, CLK), apply NOP & take CKE high.
4. Precharge all banks.
5. Issue EMRS to enable DLL.(To issue "DLL Enable" command, provide "Low" to A0, "High" to BA0 and "Low" to all of the rest address pins, A1~A11 and BA1)
6. Issue a mode register set command for "DLL reset". The additional 200 cycles of clock input is required to lock the DLL. (To issue DLL reset command, provide "High" to A8 and "Low" to BA0)
7. Issue precharge commands for all banks of the device.
8. Issue 2 or more auto-refresh commands.
9. Issue a mode register set command to initialize device operation

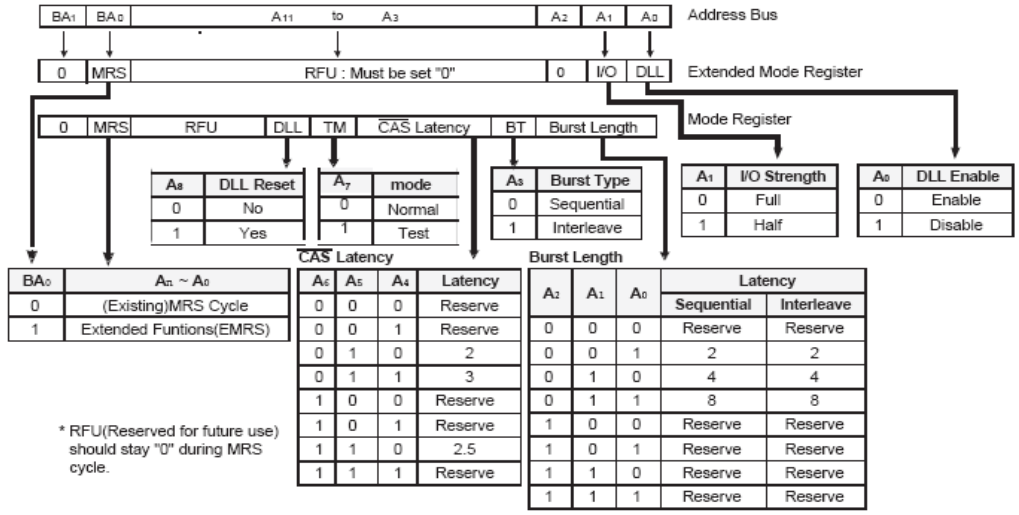


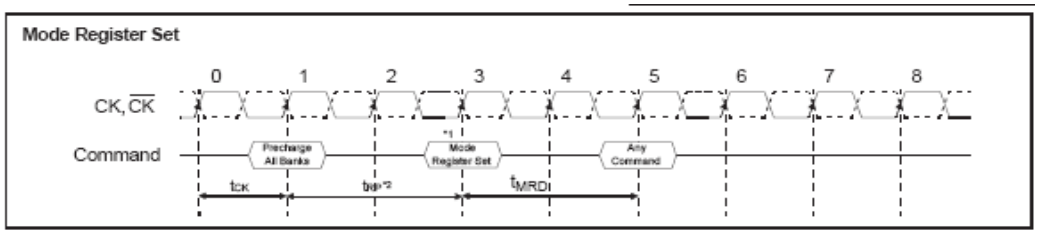
2. Mode Register Set (MRS)

The mode register stores the data for controlling the various operating modes of DDR SDRAM. It programs CAS latency, addressing mode, burst length, test mode, DLL reset and various vendor specific options to make DDR SDRAM useful for a variety of different applications. The default value of the mode register is not defined, therefore the mode register must be written after EMRS setting for proper DDR SDRAM operation.

The mode register is written by asserting low on CS, RAS, CAS, WE and BA0 (The DDR SDRAM should be in all bank precharge with CKE already high prior to writing into the mode register). The state of address pins A0 ~ A11 in the same cycle as CS, RAS, CAS, WE and BA0 low is written in the mode register. Two clock cycles are required to meet tMRD spec. The mode register contents can be changed using the same command and clock cycle requirements during operation as long as all banks are in the idle state. The mode register is divided into various fields depending on functionality. The burst length uses A0 ~ A2, addressing mode uses A3, CAS latency (read latency from column address) uses A4 ~ A6. A7 is a ProMOS specific test mode during production test. A8 is used for DLL reset. A7 must be set to low for normal MRS operation. Refer to the table for specific codes for various burst length, addressing modes and CAS latencies.

1. MRS can be issued only at all banks precharge state.
2. Minimum tRP is required to issue MRS command.





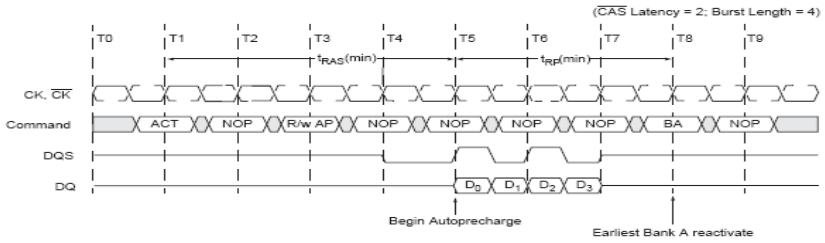
3. Precharge

The Auto Precharge operation can be issued by having column address A10 high when a Read or Write command is issued. If A10 is low when a Read or Write command is issued, then normal Read or Write burst operation is executed and the bank remains active at the completion of the burst sequence. When the Auto Precharge command is activated, the active bank automatically begins to precharge at the earliest possible moment during the Read or Write cycle once tRAS(min) is satisfied.

Read with Auto Precharge

If a Read with Auto Precharge command is initiated, the DDR SDRAM will enter the precharge operation N-clock cycles measured from the last data of the burst read cycle where N is equal to the CAS latency programmed into the device. Once the autoprecharge operation has begun, the bank cannot be reactivated until the minimum precharge time (tRP) has been satisfied.

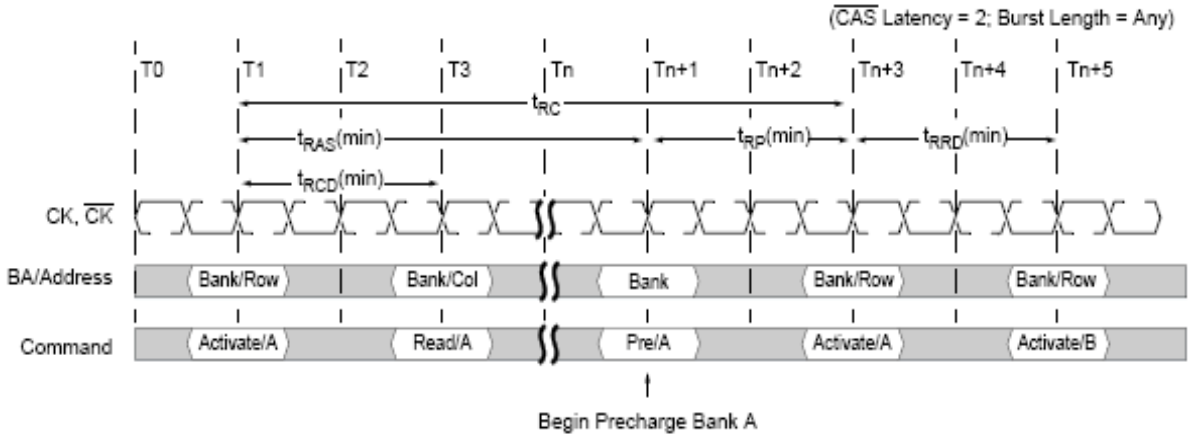
Read with Autoprecharge Timing



4. Bank Activate Command

The Bank Activate command is issued by holding CAS and WE high with CS and RAS low at the rising edge of the clock. The DDR SDRAM has four independent banks, so two Bank Select addresses (BA0 and BA1) are supported. The Bank Activate command must be applied before any Read or Write operation can be executed. The delay from the Bank Activate command to the first Read or Write command must meet or exceed the minimum RAS to CAS delay time (tRCD min). Once a bank has been activated, it must be precharged before another Bank Activate command can be applied to the same bank. The minimum time interval between interleaved Bank Activate commands (Bank A to Bank B and vice versa) is the Bank to Bank delay time (tRRD min).

Bank Activation Timing



5. Read Operation

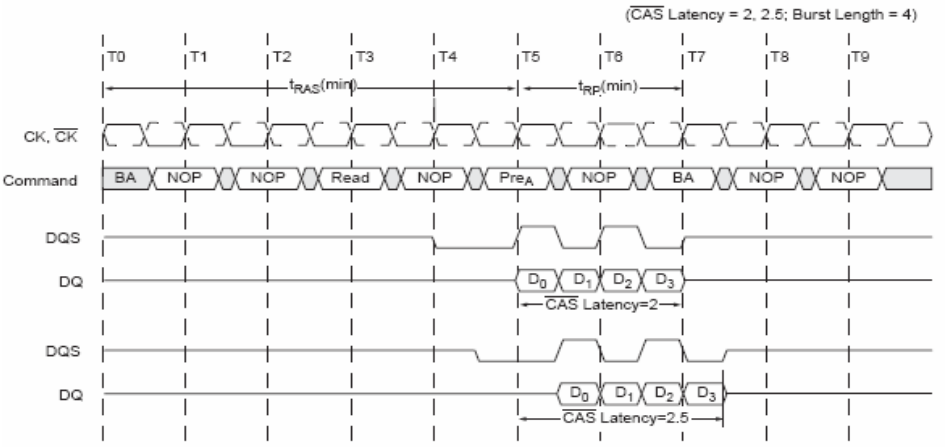
With the DLL enabled, all devices operating at the same frequency within a system are ensured to have the same timing relationship between DQ and DQS relative to the CK input regardless of device density, process variation, or technology generation. The data strobe signal (DQS) is driven off chip simultaneously with the output data (DQ) during each read cycle. The same internal clock phase is used to drive both the output data and data strobe signal off chip to minimize skew between data strobe and output data. This internal clock phase is nominally aligned to the input differential clock (CK, CK) by the on-chip DLL. Therefore, when the DLL is enabled and the clock frequency is within the specified range for proper DLL operation, the data strobe (DQS), output data (DQ), and

the system clock (CK) are all nominally aligned. Since the data strobe and output data are tightly coupled in the system, the data strobe signal may be delayed and used to latch the output data into the receiving device. The tolerance for skew between DQS and DQ (tDQSQ) is tighter than that possible for CK to DQ (tAC) or DQS to CK (tDQSCK).

6. Precharge Timing During Read Operation

For the earliest possible Precharge command without interrupting a Read burst, the Precharge command may be issued on the rising clock edge, which is CAS latency (CL) clock cycles before the end of the Read burst. A new Bank Activate (BA) command may be issued to the same bank after the RAS precharge time (tRP). A Precharge command can not be issued until tRAS(min) is satisfied.

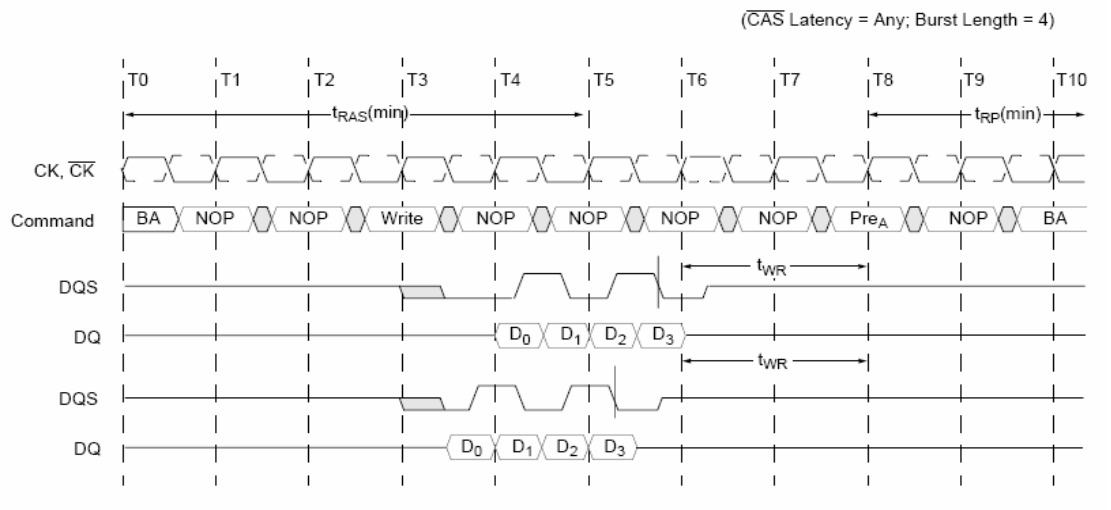
Read with Precharge Timing as a Function of $\overline{CAS}$ Latency



7.Precharge Timing During Write Operation

Precharge timing for Write operations in DRAMs requires enough time to satisfy the write recovery requirement. This is the time required by a DRAM sense amp to fully store the voltage level. For DDR SDRAMs, a timing parameter (tWR) is used to indicate the required amount of time between the last valid write operation and a Precharge command to the same bank. The "write recovery" operation begins on the rising clock edge after the last DQS edge that is used to strobe in the last valid write data. "Write recovery" is complete on the next 2nd rising clock edge that is used to strobe in the Precharge command.

Write with Precharge Timing

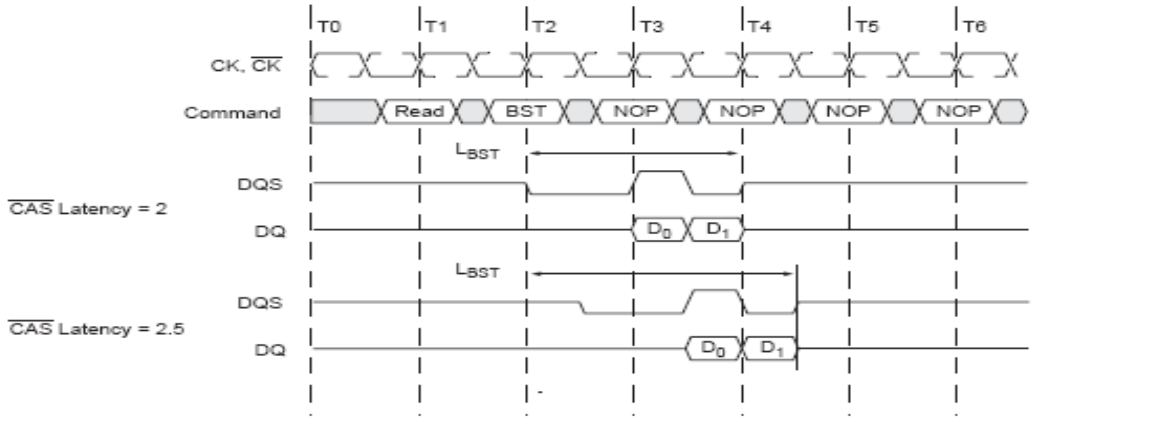


8. Burst Stop Command

The Burst Stop command is valid only during burst read cycles and is initiated by having RAS and CAS high with CS and WE low at the rising edge of the clock. When the Burst Stop command is issued during a burst Read cycle, both the output data (DQ) and data strobe (DQS) go to a high impedance state after a delay (LBST) equal to the CAS latency programmed into the device. If the Burst Stop command is issued during a burst Write cycle, the command will be treated as a NOP command.

Read Terminated by Burst Stop Command Timing

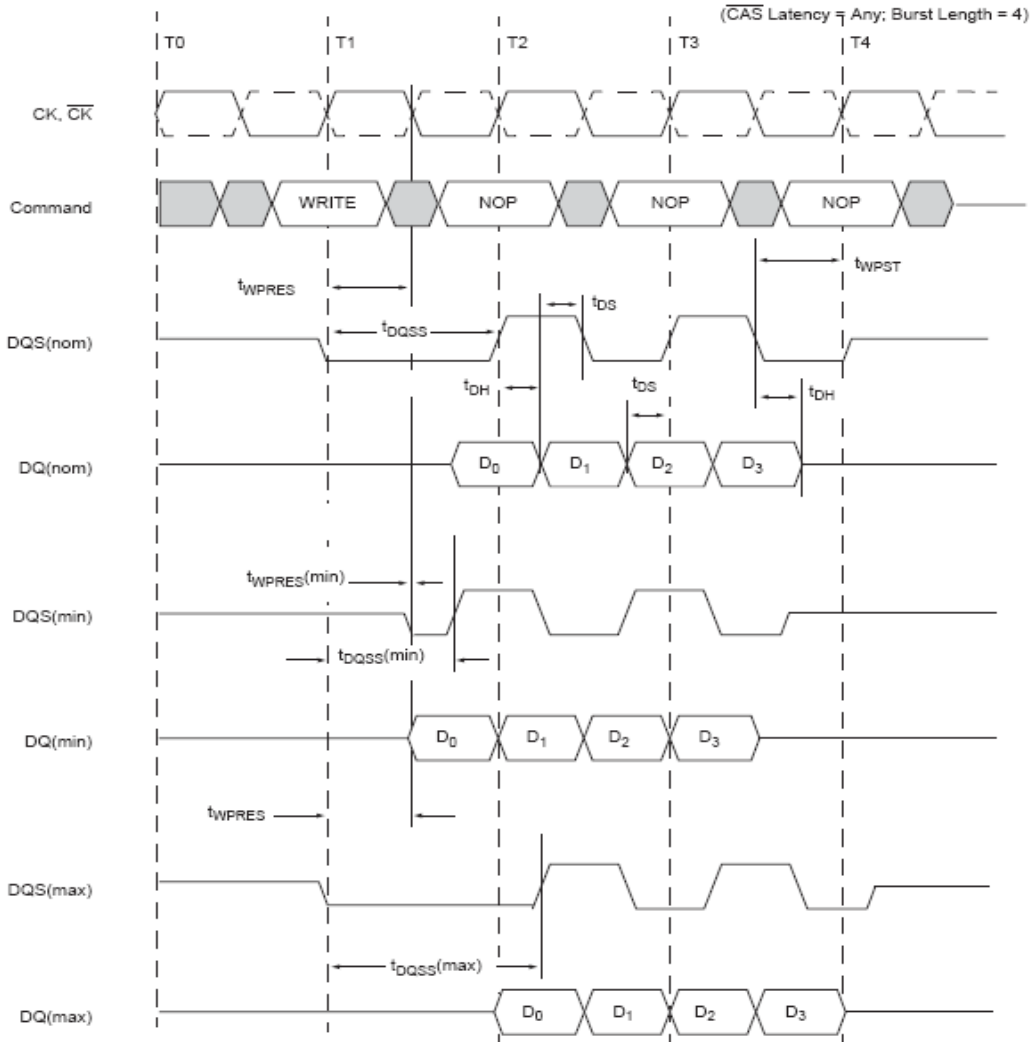
($\overline{CAS}$ Latency = 2, 2.5; Burst Length = 2)



9. Burst Write Operation

The Burst Write command is issued by having CS, CAS, and WE low while holding RAS high at the rising edge of the clock. The address inputs determine the starting column address. The memory controller is required to provide an input data strobe (DQS) to the DDR SDRAM to strobe or latch the input data (DQ) and data mask (DM) into the device. During Write cycles, the data strobe applied to the DDR SDRAM is required to be nominally centered within the data (DQ) and data mask (DM) valid windows. The data strobe must be driven high nominally one clock after the write command has been registered. Timing parameters tDQSS(min) and tDQSS(max) define the allowable window when the data strobe must be driven high. Input data for the first Burst Write cycle must be applied one clock cycle after the Write command is registered into the device (WL=1). The input data valid window is nominally centered around the midpoint of the data strobe signal. The data window is defined by DQ to DQS setup time (tQDQSS) and DQ to DQS hold time (tQDQSH). All data inputs must be supplied on each rising and falling edge of the data strobe until the burst length is completed. When the burst has finished, any additional data supplied to the DQ pins will be ignored.

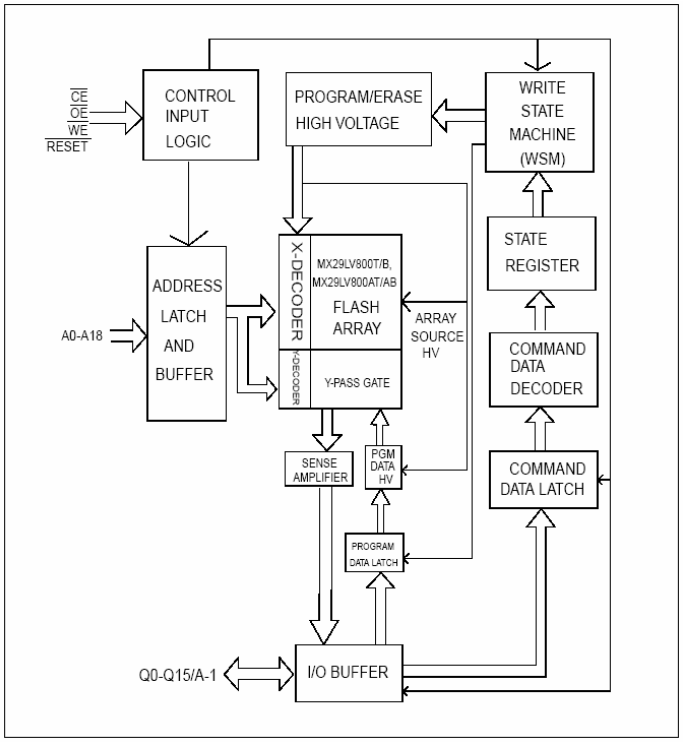
Burst Write Timing



MX29LV160BTTC (Flash) Application

The MX29LV800T/B & MX29LV800AT/AB is a 8-mega bit Flash memory organized as 1M bytes of 8 bits or 512K words of 16 bits. MXIC's Flash memories offer the most cost-effective and reliable read/write non-volatile random access memory. The MX29LV800T/B & MX29LV800AT/AB is packaged in 44-pin SOP, 48-pin TSOP, and 48-ball CSP. It is designed to be reprogrammed and erased in system or in standard EPROM programmers.

BLOCK DIAGRAM



1. COMMAND DEFINITIONS

Device operations are selected by writing specific address and data sequences into the command register. Writing incorrect address and data values or writing them in the improper sequence will reset the device to the read mode. Table 5 defines the valid register command sequences. Note that the Erase Suspend (B0H) and Erase Resume (30H) commands are valid only while the Sector Erase operation is in progress.

TABLE 6. MX29LV800T/B & MX29LV800AT/AB BUS OPERATION

DESCRIPTION	$\overline{CE}$	$\overline{OE}$	$\overline{WE}$	ADDRESS								Q0~Q7	Q8~Q15	
				A18 | A12	A10 | A11	A9	A8 | A7	A6	A5 | A2	A1	A0		BYTE =VIH	BYTE =VIL
Read	L	L	H	AIN								Dout	Dout	=High Z DQ15=A-1
Write	L	H	L	AIN								DIN(3)	DIN	
Reset	X	X	X	X								High Z	High Z	High Z
Temporary sector unlock	X	X	X	AIN								DIN	DIN	High Z
Output Disable	L	H	H	X								High Z	High Z	High Z
Standby	Vcc ± 0.3V	X	X	X								High Z	High Z	High Z
Sector Protect	L	H	L	SA	X	X	X	L	X	H	L	DIN	X	X
Sector Unprotected	L	H	L	X	X	X	X	H	X	H	L	DIN	X	X
Sector Protection Verify	L	L	H	SA	X	VID	X	L	X	H	L	CODE(5)	X	X

NOTES:
1. Manufacturer and device codes may also be accessed via a command register write sequence. Refer to Table 5.
2. VID is the Silicon-ID-Read high voltage, 11.5V to 12.5V.
3. Refer to Table 5 for valid Data-In during a write operation.
4. X can be VIL or VIH.
5. Code=00H/XX00H means unprotected.
   Code=01H/XX01H means protected.
6. A18~A12=Sector address for sector protect.
7. The sector protect and chip unprotected functions may also be implemented via programming equipment.

2. WRITE COMMANDS/COMMAND SEQUENCES

To program data to the device or erase sectors of memory, the system must drive WE and CE to VIL, and OE to VIH. The device features an Unlock Bypass mode to facilitate faster programming. Once the device enters the Unlock Bypass mode, only two write cycles are required to program a byte, instead of four. The "byte Program Command Sequence" section has details on programming data to the device using both standard and Unlock Bypass command sequences. An erase operation can erase one sector, multiple sectors, or the entire device. Table indicates the address space that each sector occupies. A "sector address" consists of the address bits required to uniquely select a sector. The "Writing specific address and data commands or sequences into the command register initiates device operations. Figure 1 defines the valid register command sequences. Writing incorrect address and data values or writing them in the improper sequence resets the device to reading array data. Section has details on erasing a sector or the entire chip, or suspending/resuming the erase operation.

After the system writes the auto select command sequence, the device enters the auto select mode. The system can then read auto select codes from the internal register (which is separate from the memory array) on Q7-Q0. Standard read cycle timings apply in this mode. Refer to the Auto select Mode and Auto select Command Sequence section for more information. ICC2 in the DC Characteristics table represents the active current specification for the write mode. The "AC Characteristics" section contains timing specification table and timing diagrams for write operations.

Figure 1

Sector	Sector Size		Address range		Sector Address						
	Byte Mode	Word Mode	Byte Mode (x8)	Word Mode (x16)	A18	A17	A16	A15	A14	A13	A12
SA0	64Kbytes	32Kwords	00000h-0FFFFh	00000h-07FFFh	0	0	0	0	X	X	X
SA1	64Kbytes	32Kwords	10000h-1FFFFh	08000h-0FFFFh	0	0	0	1	X	X	X
SA2	64Kbytes	32Kwords	20000h-2FFFFh	10000h-17FFFh	0	0	1	0	X	X	X
SA3	64Kbytes	32Kwords	30000h-3FFFFh	18000h-1FFFFh	0	0	1	1	X	X	X
SA4	64Kbytes	32Kwords	40000h-4FFFFh	20000h-27FFFh	0	1	0	0	X	X	X
SA5	64Kbytes	32Kwords	50000h-5FFFFh	28000h-2FFFFh	0	1	0	1	X	X	X
SA6	64Kbytes	32Kwords	60000h-6FFFFh	30000h-37FFFh	0	1	1	0	X	X	X
SA7	64Kbytes	32Kwords	70000h-7FFFFh	38000h-3FFFFh	0	1	1	1	X	X	X
SA8	64Kbytes	32Kwords	80000h-8FFFFh	40000h-47FFFh	1	0	0	0	X	X	X
SA9	64Kbytes	32Kwords	90000h-9FFFFh	48000h-4FFFFh	1	0	0	1	X	X	X
SA10	64Kbytes	32Kwords	A0000h-AFFFFh	50000h-57FFFh	1	0	1	0	X	X	X
SA11	64Kbytes	32Kwords	B0000h-BFFFFh	58000h-5FFFFh	1	0	1	1	X	X	X
SA12	64Kbytes	32Kwords	C0000h-CFFFFh	60000h-67FFFh	1	1	0	0	X	X	X
SA13	64Kbytes	32Kwords	D0000h-DFFFFh	68000h-6FFFFh	1	1	0	1	X	X	X
SA14	64Kbytes	32Kwords	E0000h-EFFFFh	70000h-77FFFh	1	1	1	0	X	X	X
SA15	32Kbytes	16Kwords	F0000h-F7FFFh	78000h-7BFFFh	1	1	1	1	0	X	X
SA16	8Kbytes	4Kwords	F8000h-F9FFFh	7C000h-7CFFFh	1	1	1	1	1	0	0
SA17	8Kbytes	4Kwords	FA000h-FBFFFh	7D000h-7DFFFh	1	1	1	1	1	0	1
SA18	16Kbytes	8Kwords	FC000h-FFFFFh	7E000h-7FFFFh	1	1	1	1	1	1	X

3. READ/RESET COMMAND

The read or reset operation is initiated by writing the read/reset command sequence into the command register. Microprocessor read cycles retrieve array data. The device remains enabled for reads until the command register contents are altered. If program-fail or erase-fail happen, the write of F0H will reset the device to abort the operation. A valid command must then be written to place the device in the desired state.

4. READING ARRAY DATA

The device is automatically set to reading array data after device power-up. No commands are required to retrieve data. The device is also ready to read array data after completing an Automatic Program or Automatic Erase algorithm. After the device accepts an Erase Suspend command, the device enters the Erase Suspend mode. The system can read array data using the standard read timings, except that if it reads at an address within erase suspended sectors, the device outputs status data. After completing a programming operation in the Erase Suspend mode, the system may once again read array data with the same exception. See Erase Suspend/Erase Resume Commands" for more information on this mode. The system must issue the reset command to re-enable the device for reading array data if Q5 goes high, or while in the auto select mode. See the "Reset Command" section, next.

5. RESET COMMAND

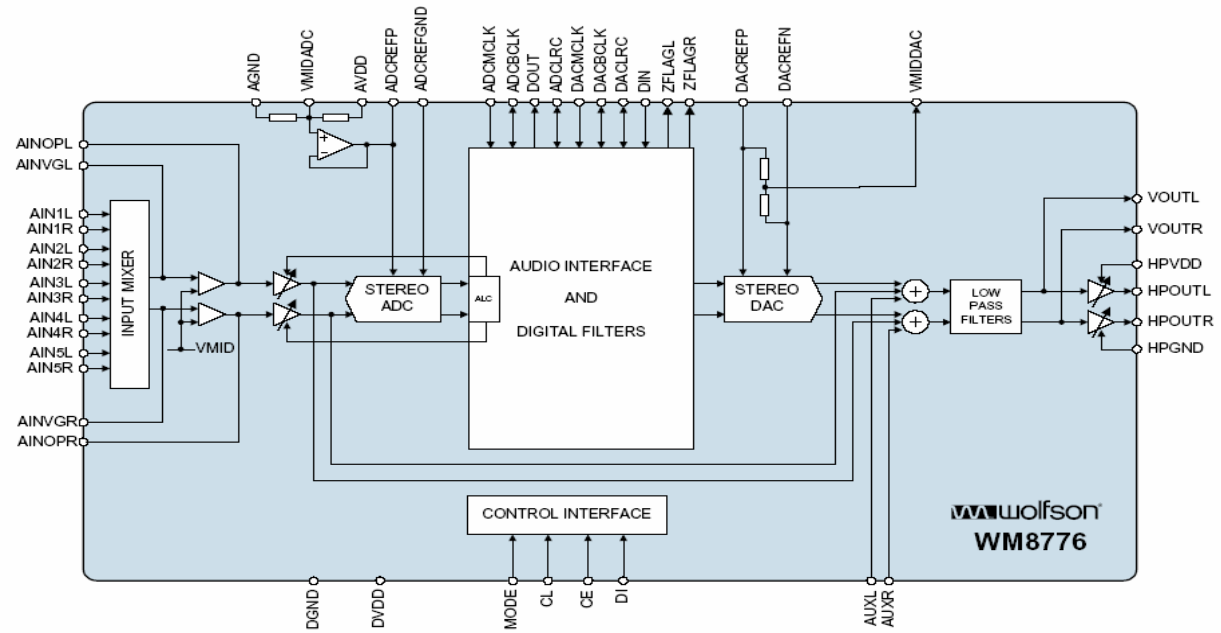
Writing the reset command to the device resets the device to reading array data. Addresses bits are don't care for this command. The reset command may be written between the sequence cycles in an erase command sequence before erasing begins. This resets the device to reading array data. Once erasure begins, however, the device ignores reset commands until the operation is complete. The reset command may be written between the sequence cycles in a program command sequence before programming begins. This resets the device to reading array data (also applies to programming in Erase Suspend mode). Once programming begins, however, the device ignores reset commands until the operation is complete. The reset command may be written between the sequence cycles in an SILICON ID READ command sequence. Once in the SILICON ID READ mode, the reset command must be written to return to reading array data (also applies to SILICON ID READ during Erase Suspend). If Q5 goes high during a program or erase operation, writing the reset command returns the device to reading array data (also applies during Erase Suspend).

WM8776 Application

The WM8776 is a high performance, stereo audio codec with five channel input selector. The WM8776 is ideal for surround sound processing applications for home hi-fi, DVD-RW and other audiovisual equipment. Etch ADC channel has programmable gain control with automatic level control. Digital audio output word lengths from 16-32 bits and sampling rates from 32kHZ to 96KHZ are supported. The DAC has an input mixer allowing an external analogue signal to be mixed with the DAC signal. There are also Headphone and line outputs, with control for the headphone

The WM8776 supports fully independent sample rates for the ADC and DAC. The audio data interface supports I2S, left justified, right justified and DSP formats.

BLOCK DIAGRAM



1. Audio sample rate

The master clock forWM8776 supports DAC and ADC audio sampling rates 256fs to 768fs, where fs is the audio sample frequency (DACLRC or ADCLRC) typically 32KHZ, 44.1KHZ, 48KHZ or 96KHZ (the DAC also supports operation at 128fs and 192fs and 192KHZ sample rate). The master clock is used to operate the digital filters and the noise shaping circuits.

In slave mode the WM8776 has a master detection circuit that automatically determines the relationship between the master clock frequency and the sampling rate (to within +/- 32 system clocks) If there is a greater than 32 clocks error the interface is disabled and ADCLRC/DACLRC for optical performance, although the WM8776 is tolerant of phase variations or jitter on this clock.

Table shows the typical master clock frequency inputs for the WM8776

SAMPLING RATE (DACLRC/ ADCLRC)	System Clock Frequency (MHz)					
	128fs	192fs	256fs	384fs	512fs	768fs
	DAC ONLY					
32kHz	4.096	6.144	8.192	12.288	16.384	24.576
44.1kHz	5.6448	8.467	11.2896	16.9340	22.5792	33.8688
48kHz	6.144	9.216	12.288	18.432	24.576	36.864
96kHz	12.288	18.432	24.576	36.864	Unavailable	Unavailable
192kHz	24.576	36.864	Unavailable	Unavailable	Unavailable	Unavailable

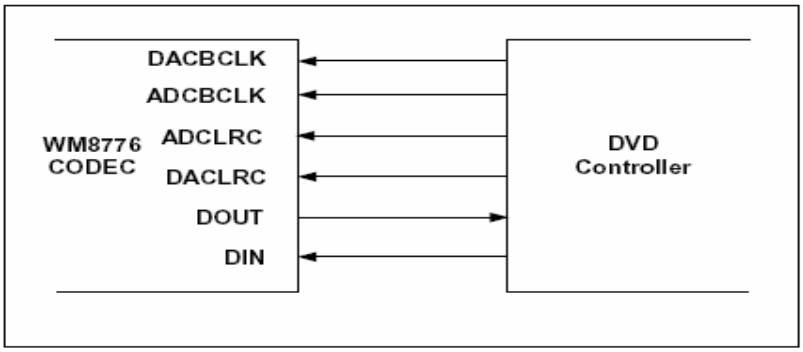
2. DIGITAL AUDIO INTERFACE

1. Slave mode

The audio interfaces operations in either slave mode selectable using the MS control bit. In slave mode DIN is always an input to the WM8776 and DOUT is always an output. The default is Slave mode. In slave mode (ms=0) ADCLRC, DACLRC, ADCBCLK, DACBCLK are input to the WM8776

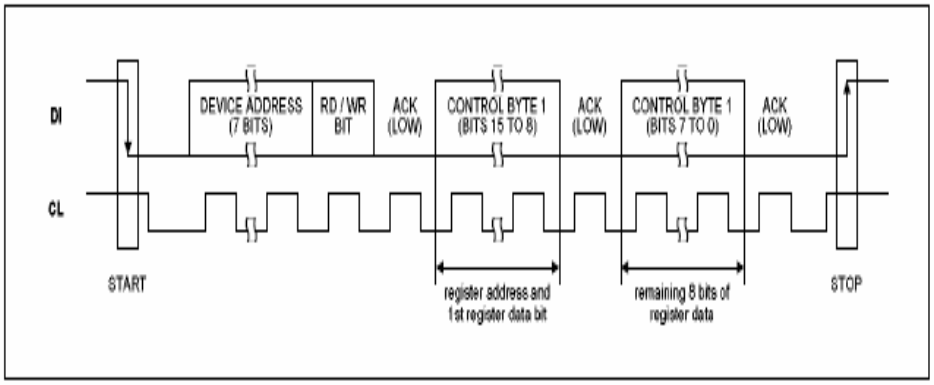
DIN and DACLRC are sampled by the WM8776 on the rising edge of DACBCLK; ADCLRC is sampled on the rising edge of ADCBCLK. ADC data is output on DOUT and changes on the falling edge of ADCBCLK. By setting control bit BCLKINV the polarity of ADCBCLK and DACBCLK may be reversed so that DIN and DACLRC are sample on the falling edge of DACBCLK, ADCLRC is sampled on the falling edge of ADCBCLK and DOUT changes on the rising of ADCBCLK

Slave mode as shown in the following figure.



2. 2 Wire serial control mode

The wm8776 supports software control via a 2-wire serial bus. Many devices can be controlled by the same bus, and each device has a unique 7-bit address (this is not the same as the 7-bit address of each register in the wm8776). The wm8776 operates as a slave device only.
2-wire serial interface as shown in the following figure.



The wm8776 has two possible device addresses, which can be selected using the CE pin
In the L32 LCD TV CE pin is LOW (device address is 34h)

CE STATE	DEVICE ADDRESS
Low	0011010 (0 x 34h)
High	0011011 (0 x 36h)

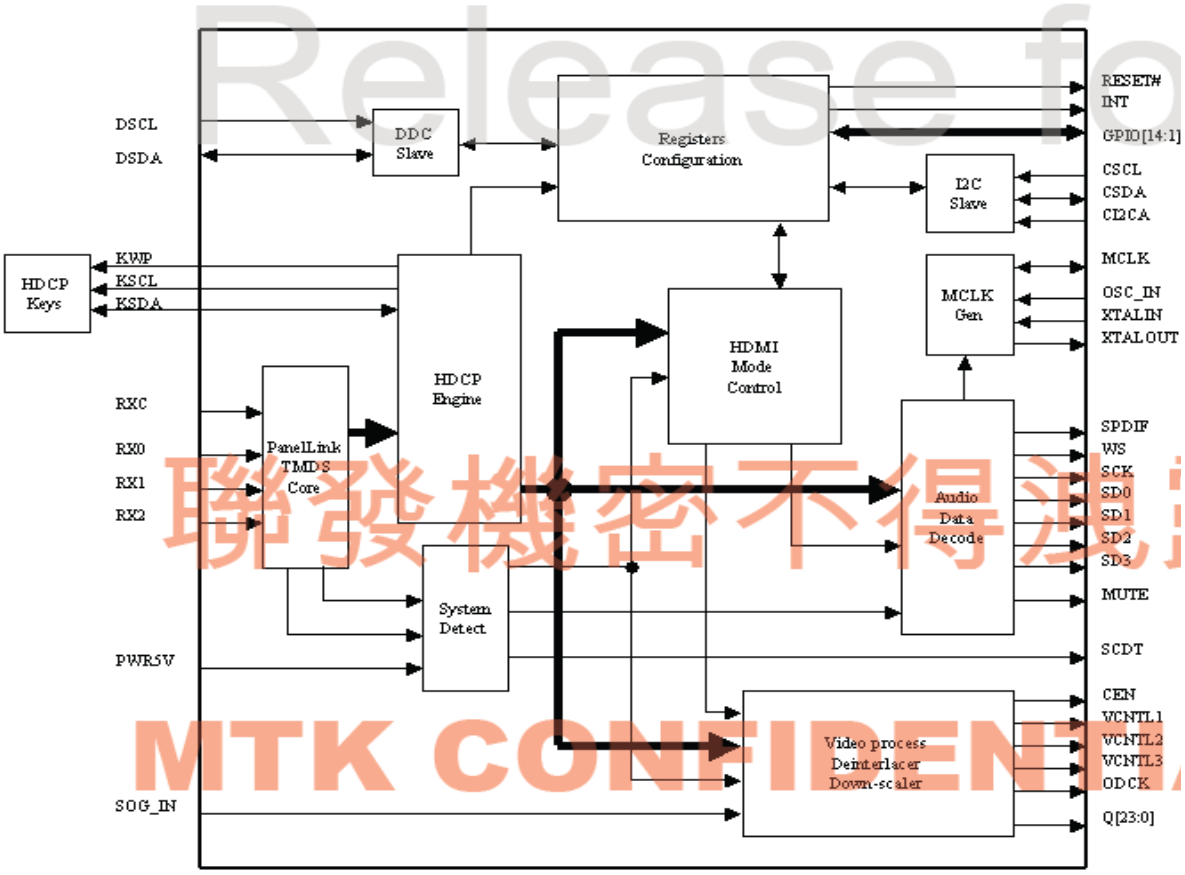
In the L32 wm8776 has 2-wire interface

MODE	Control Mode
0	2 wire interface
1	3 wire interface

MT8293 Application

The MT8293 provides a complete solution for receiving HDMI compliant digital audio and video. Specialized audio and video processing is available within the MT8293 to easily and cost effectively adds HDMI capability to consumer electronics devices such as digital TVs, plasma displays, LCD TVs and projectors.

BLOCK DIAGRAM



1. TMDS Digital Core

The core performs 10-to-8-bit TMDS decoding on the audio and video received from the three TMDS differential data lines along with a TMDS differential clock. The TMDS core supports link clock rates to 165MHZ, including CE modes to 720P/1080I/1080P.

2. Active port detection

The Pane Link core detects an active TMDS clock and actively toggling DE signal. These states are accessible in register bits, useful for monitoring the status of the HDMI input or for automatically powering down the receiver. The 5V supply from the HDMI connector is used as a cable detect indicator. The MT8293 can monitor the presence of this+5V supply and, if and when necessary, provide a fast audio mute without pops when it senses the HDMI cable pulled. The microcontroller can also poll registers in the MT8293 to check whether an HDMI cable is connected.

3. HDCP Decryption

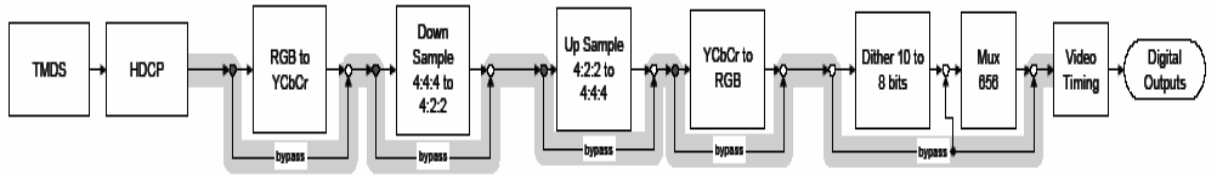
The MT8293 external EEPROM for encrypt HDCP keys. HDCP decryption contains all necessary logic to decrypt the incoming audio and video data. The decryption process is entirely controlled by the host microprocessor through a set sequence of register reads and wires through the DDC channel. Pre-programmed HDCP keys and key Selection Vector are used in the decryption process. A resulting calculated to an XOR mask during each clock cycle to decrypt the audio/video data in sync with the host.

4. Video Data Conversion and Video Output

The MT8293 can output video in many different formats as shown in the following figure.

Color Space	Video Format	Bus Width	HSYNC / VSYNC	Output Clock (MHz)[3]							Notes
				480i	480p	XGA	720p	1080i	1080p	UXGA	
RGB	4:4:4	24	Separate	13.25 / 27	27	65	74.25	74.25	148.5	162	
YCbCr	4:4:4	24	Separate	13.25 / 27	27	65	74.25	74.25	148.5	162	
YCbCr	4:2:2	16/20/24	Sep, Emb.	13.25 / 27	27	—	74.25	74.25	148.5	162	1,2
YCbCr	4:2:2	8/10/12	Sep, Emb.	27	54	135	148.5	148.5	—	—	1,4
RGB	4:4:4	48	Separate	6.73/13.5	13.5	32.25	37.13	37.13	74.25	81	5
YCbCr	4:4:4	48	Separate	6.73/13.5	13.5	32.25	37.13	37.13	74.25	81	5
RGB	4:4:4	12	Separate	13.25 / 27	27	65	74.25	74.25	—	—	6
YCbCr	4:4:4	12	Separate	13.25 / 27	27	65	74.25	74.25	—	—	6
YCbCr	4:2:2	8/10/12	Sep, Emb.	13.25/27	27	65	74.25	74.25	—	81	1,4

The receiver can also process the video data before it is output as show below figure



5. I²c Interface to Display Controller

The Controller I²c interface (CSDA, CSCL) on the MT8293 is a slave interface capable of running up to 400KHZ. This bus is used to configure the MT8293 by reading/writing to the appropriate registers. The MT8293 is accessible on the local I²c bits at two-device address. The logic state of the CI2CA pin is latched on the rising edge of REST# providing a choice of two pairs of device address.

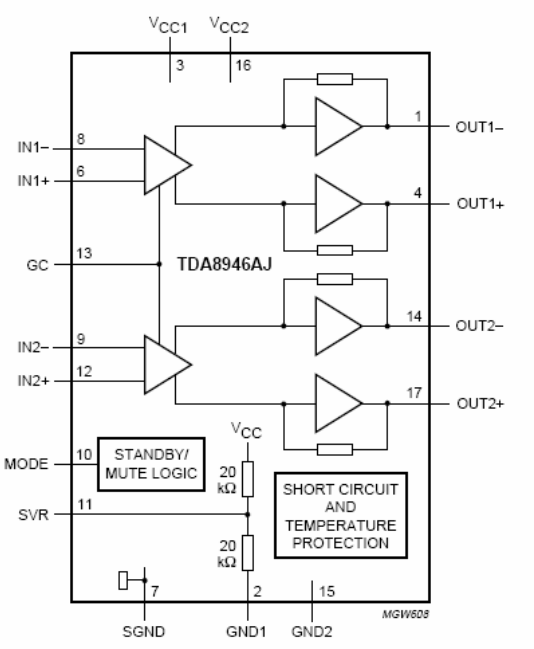
Control of local I²c address with CI2CA pin

	CI2CA = Pull Down	CI2CA = Pull Up
First Device Addr	0x60	0x62
Second Device Addr	0x68	0x6A

TDA8946 Application

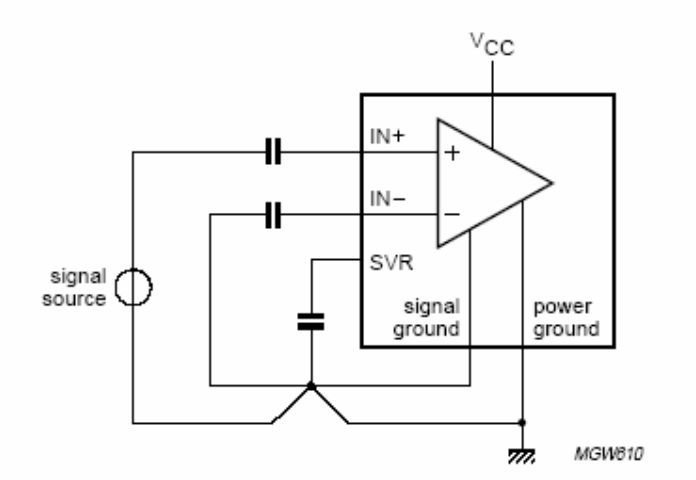
In L32 TV the TDA8946AJ is a dual-channel audio power amplifier with DC gain control. It has an output power of 2 ． 10 W at an 8 ． load and a 12 V supply.

Block diagram



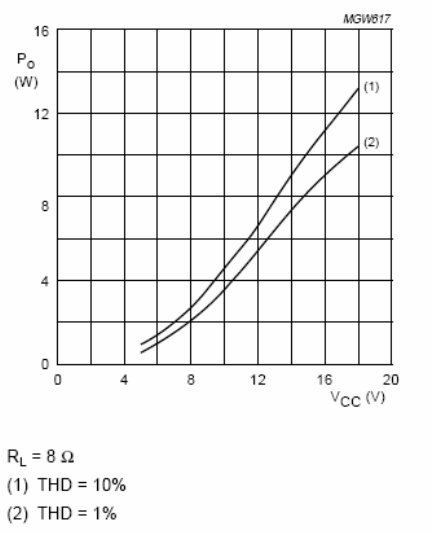
1. Input configuration

The TDA8946AJ inputs can be driven symmetrical (floating) as well as asymmetrical. In the asymmetrical mode one input pin is connected via a capacitor to the signal source and the other input is connected to the signal ground. The signal ground should be as close as possible to the SVR (electrolytic) capacitor ground. Note that the DC level of the input pins is half of the supply voltage VCC, so coupling capacitors for both pins are necessary



2. Output power measurement

The output power as a function of the supply voltage is measured on the output pins at THD = 10%,in the L32 LCD TV Vcc=12V so we can see as shown in the following figure output about 7W.



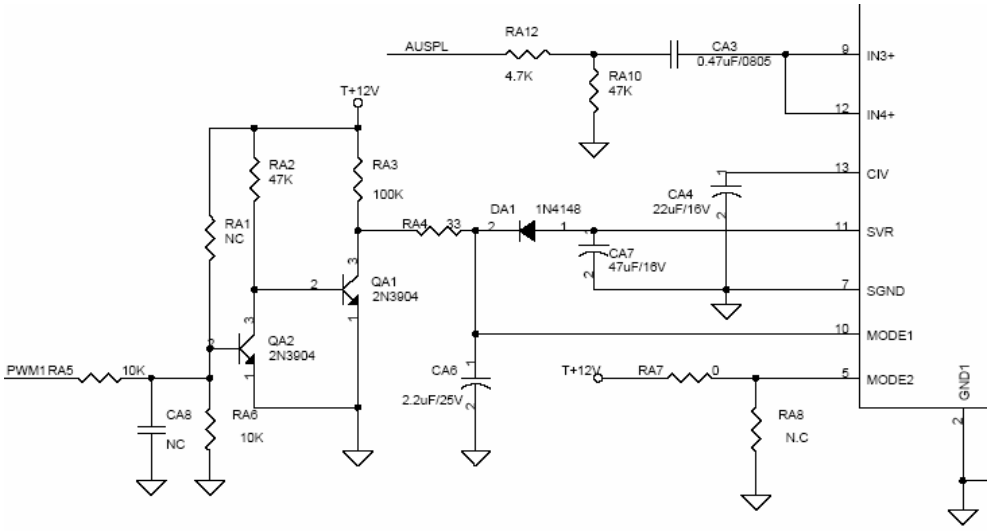
R_L = 8 Ω
(1) THD = 10%
(2) THD = 1%

3. Mode selection

In the L32 LCD TV TDA8946AJ has two functional modes, which can be selected by applying the proper DC voltage to pin MODE.

1. Mute — In this mode the amplifier is DC-biased but not operational (no audio output). This allows the input coupling capacitors to be charged to avoid pop-noise. The device is in mute mode when 3.5 V < VMODE < (VCC – 1.5 V).

2. Operating — In this mode the amplifier is operating normally. The operating mode is activated at VMODE<1.0V.



MT5351 Application :

MediaTek MT5351 is a DTV Backend Decoder SOC which support flexible transport demux , HD MPEG-2 video decoder , JPEG decoder , MPEG1,2,MP3,AC3 audio decoder , HDTV encoder . The MT5351 enables consumer electronics manufactures to build high quality , feature-rich DTV , STB or other home entertainment audio/video device.World-Leading Technology : HW support worldwide major broadcast network and CA standards , include ATSC , DVB , OpenCable , DirectTV , MHP.Rich Feature for high value product : To enrich the feature of DTV , the MT5351 support 1394-5C component to external DVHS . Dual display , PIP/POP and quad pictures provide user a whole new viewing experience.Credible Audio/Video Quality : The MT5351 use advanced motion-adaptive de-interlace algorithm to achieve the best movie/video playback , The embedded 4X over-sample video DAC could generate very fine display quality . Also , the audio 3D surround and equalizer provide professional entertainment.

General Feature List :

1 . Host CPU:

1. ARM 926EJ
2. 16K I-Cache and 16K D-Cache
3. 8K Data TCM and 8K instruction
4. JTAG ICE interface
5. Watch Dog timers

2 . Transport Demuxer :

1. Support 3 independent transport stream inputs
2. Support serial/parallel interface for each transport stream input
3. Support ATSC , DVB , and MPEG2 transport stream inputs.
4. Programmable sync detection.
5. Support DES/3-DES De-scramble.
6. 96 PID filter and 128 section filters.
7. Support TS recording via IEEE1394 interface.

3 . MPEG2 Decoder :

1. Support dual MPEG-2 HD decoder or up to 8 SD decoder.
2. Complaint to MP@ML , MP@HL and MPEG-1 video standards.

4 . JPEG Decoder :

1. Decode Base-line or progressive JPEG file.

5 . 2D Graphics :

1. Support multiple color modes.
2. Point , horizontal/vertical line primitive drawing.
3. Rectangle fill and gradient fill functions.
4. Bitblt with transparent , alpha blending , alpha composition and stretch.
5. Font rendering by color expansion.
6. Support clip masks.
7. YCrCb to RGB color space transfer.

6 . OSD Display :

1. 3 linking list OSDs with multiple color mode.
2. OSD scaling with arbitary ratio from 1/2x to 2x.
3. Square size , 32x32 or 64x64 pixel , hardware cursor.

7 . Video Processing :

1. Advanced Motion adaptive de-interlace on SDTV resolution.
2. Support clip
3. 3:2/2:2 pull down source detection.
4. Arbitrary ratio vertical/horizontal scaling of video , from 1/15X to 16X.
5. Support Edge preserve.
6. Support horizontal edge enhancement.
7. Support Quad-Picture.

8 . Main Display :

1. Mixing two video and three OSD and hardware cursor.
2. Contrast/Brightness adjustment.
3. Gamma correction.
4. Picture-in-Picture(PIP).
5. Picture-Out-Picture(POP).
6. 480i/576i/480p/576p/720p/1080i output

9 . Auxiliary Display :

1. Mixing one video and one OSD.
2. 480i/576i output.

10 . TV Encoder :

1. Support NTSC M/N , PAL M/N/B/D/G/H/I
2. Macrovision Rev 7.1.L1
3. CGMS/WSS.
4. Closed Captioning.
5. Six 12-bit video DACs for CVBS , S-video or RGB/YPbPr output.

11 . Digital Video Interface :

1. Support SAV/EAV.
2. Support 8/16 for SD/HD digital video input.
3. Support 8/16/24 bits digital output for main display.
4. Support 8 bits digital output for aux display.

12 . DRAM Controller :

1. Support 64Mb to 1Gb DDR DRAM devices.
2. Configurable 32/64 bit data bus interface.
3. Support DDR266 , DDR333 , DDR400 , JEDEC specification compliant SDRAM.

13 . Peripheral Bus Interface :

1. Support NOR/NAND flash.
2. Support CableCard host control bus.

14 . Audio :

1. Support Dolby Digital AC-3 decoding.
2. MPEG-1 layer I/II , MP3 decoding.
3. Dolby prologic II.
4. Main audio output : 5.1ch + 2ch (down mix)
5. Auxiliary audio output : 2ch.
6. Pink noise and white noise generator.
7. Equalizer.
8. Bass management.
9. 3D surround processing include virtual surround.
10. Audio and video lip synchronization.
11. Support reverberation.
12. SPDIF out.
13. I2S I/F.

15 . Peripherals :

1. Three UARTs with Tx and Rx FIFO , two of them have hardware flow control.
2. Two serial interfaces , one is master only the other can be set to master mode or slave mode.
3. Two PWMs.
4. IR blaster and receiver.
5. IEEE1394 link controller.
6. IDE bus : ATA/ATAPI7 UDMA mode 5 , 100MB/s.
7. Real-time clock and watchdog controller.
8. Memory card I/F : MS/MS-pro ,SD ,CF ,and MMC
9. PCMCIA/POD/CI interface

16 . IC Outline :

1. 471 Pin BGA Package.
2. 3.3V/1.2V dual Voltage.

MX29LV320BTTC (Flash) Application :

The MX29LV320AT/B is a 32-mega bit Flash memory organized as 4M bytes of 8 bits and 2M words of 16 bits. MXIC's Flash memories offer the most cost-effective and reliable read/write non-volatile random access memory.

The MX29LV320AT/B is packaged in 48-pin TSOP and 48-ball CSP. It is designed to be reprogrammed and erased in system or in standard EPROM programmers. The standard MX29LV320AT/B offers access time as fast as 70ns, allowing operation of high-speed microprocessors without wait states. To eliminate bus contention, the MX29LV320AT/B has separate chip enable (CE) and output enable (OE) controls.

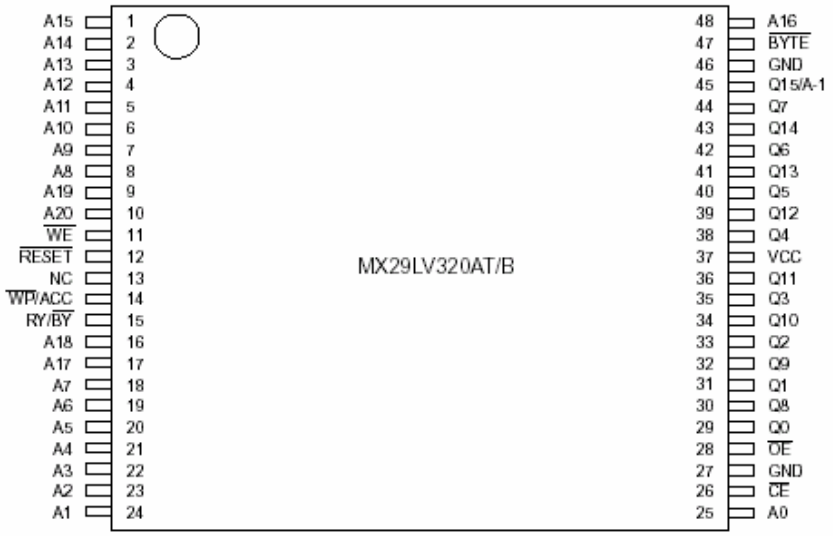
MXIC's Flash memories augment EPROM functionality with in-circuit electrical erasure and programming. The MX29LV320AT/B uses a command register to manage this functionality. MXIC Flash technology reliably stores memory contents even after 100,000 erase and program cycles. The MXIC cell is designed to optimize the erase and program mechanisms. In addition, the combination of advanced tunnel oxide processing and low internal electric fields for erase and programming operations produces reliable cycling.

The MX29LV320AT/B uses a 2.7V to 3.6V VCC supply to perform the High Reliability Erase and auto Program/Erase algorithms.

The highest degree of latch-up protection is achieved with MXIC's proprietary non-epi process. Latch-up protection is proved for stresses up to 100 milliamperes on address and data pin from -1V to VCC + 1V.

PIN CONFIGURATION

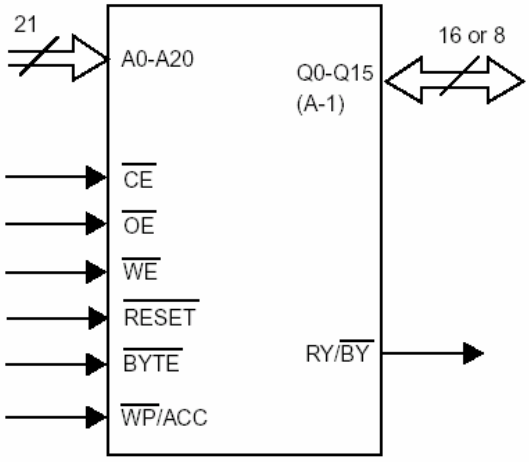
48 TSOP



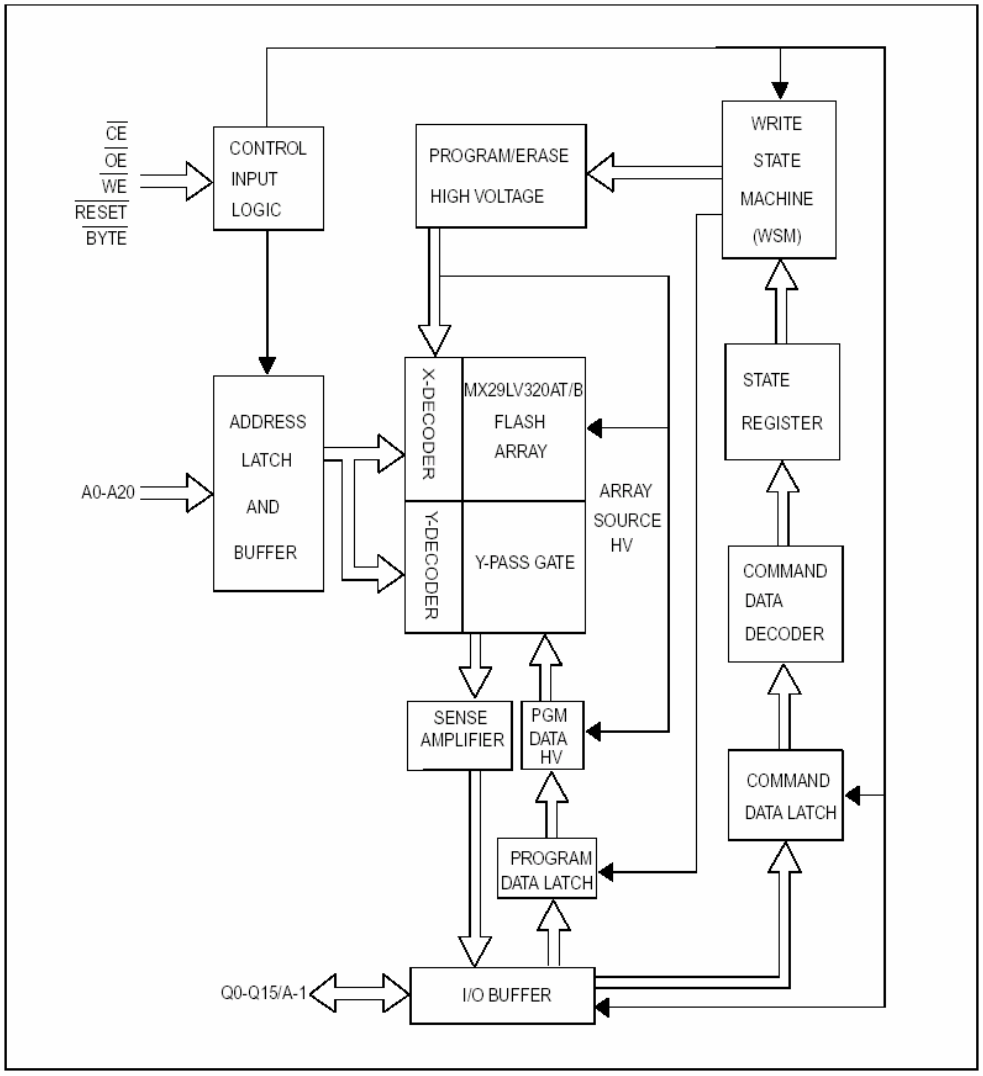
PIN DESCRIPTION

SYMBOL	PIN NAME
A0~A20	Address Input
Q0~Q14	15 Data Inputs/Outputs
Q15/A-1	Q15(Data Input/Output, word mode) A-1(LSB Address Input, byte mode)
$\overline{CE}$	Chip Enable Input
$\overline{WE}$	Write Enable Input
$\overline{OE}$	Output Enable Input
$\overline{BYTE}$	Word/Byte Selection Input
$\overline{RESET}$	Hardware Reset Pin, Active Low
RY/$\overline{BY}$	Read/Busy Output
VCC	3.0 volt-only single power supply
$\overline{WP}$/ACC	Hardware Write Protect/Acceleration Pin
GND	Device Ground
NC	Pin Not Connected Internally

LOGIC SYMBOL



BLOCK DIAGRAM



BUS OPERATION--1

Operation	$\overline{CE}$	$\overline{OE}$	$\overline{WE}$	$\overline{RESET}$	$\overline{WP}$/ACC	Addresses (Note 2)	Q0~Q7	Q8 ~ Q15	
								$\overline{Byte}$=VIH	$\overline{Byte}$=VIL
Read	L	L	H	H	L/H	A_{IN}	D_{OUT}	D_{OUT}	Q8-A14 =High-Z Q15=A-1
Write (Note 1)	L	H	L	H	Note 3	A_{IN}	D_{IN}	D_{IN}	
Accelerate Program	L	H	L	H	V_{HH}	A_{IN}	D_{IN}	D_{IN}	
Standby	VCC ± 0.3V	X	X	VCC ± 0.3V	H	X	High-Z	High-Z	High-Z
Output Disable	L	H	H	H	L/H	X	High-Z	High-Z	High-Z
Reset	X	X	X	L	L/H	X	High-Z	High-Z	High-Z
Sector Group Protect (Note 2)	L	H	L	V_{ID}	L/H	Sector Addresses, A6=L, A1=H, A0=L	D_{IN}, D_{OUT}	X	X
Chip Unprotect (Note 2)	L	H	L	V_{ID}	Note 3	Sector Addresses, A6=H, A1=H, A0=L	D_{IN}, D_{OUT}	X	X
Temporary Sector Group Unprotect	X	X	X	V_{ID}	Note 3	A_{IN}	D_{IN}	D_{IN}	High-Z

Legend:

L=Logic LOW=VIL, H=Logic High=VIH, VID=12.0 0.5V, VHH=11.5-12.5V, X=Don't Care, AIN=Address IN, DIN=Data IN,DOUT=Data OUT

Notes:

1. When the WP/ACC pin is at VHH, the device enters the accelerated program mode. See "Accelerated Program Operations" for more information.

2.The sector group protect and chip unprotect functions may also be implemented via programming equipment. See the "Sector Group Protection and Chip Unprotection" section.

3.If WP/ACC=VIL, the two outermost boot sectors remain protected. If WP/ACC=VIH, the two outermost boot sector protection depends on whether they were last protected or unprotected using the method described in "Sector/Sector Block Protection and Unprotection". If WP/ACC=VHH, all sectors will be unprotected.

4.DIN or Dout as required by command sequence, data polling, or sector protection algorithm.

5.Address are A20:A0 in word mode (BYTE=VIH), A20:A-1 in byte mode (BYTE=VIL).

BUS OPERATION--2

Operation	$\overline{CE}$	$\overline{OE}$	$\overline{WE}$	A20 to A12	A11 to A10	A9	A8 to A7	A6	A5 to A2	A1	A0	Q0-Q7	Q8-Q15
Read Silicon ID Manufacturer Code	L	L	H	X	X	V_{ID}	X	L	X	L	L	C2H	X
Read Silicon ID MX29LV320AT	L	L	H	X	X	V_{ID}	X	L	X	L	H	A7H	22h(word)
													X (byte)
Read Silicon ID MX29LV320AB	L	L	H	X	X	V_{ID}	X	L	X	L	H	A8H	22h(word)
													X (byte)
Sector Protect Verification	L	L	H	SA	X	V_{ID}	X	L	X	H	L	01h(1), or 00h	X
Security Sector Indicater Bit (Q7)	L	L	H	X	X	V_{ID}	X	L	X	H	H	99h(2), or 19h	X

Notes:

1.Code=00h means unprotected, or code=01h protected.

2.Code=99 means factory locked, or code=19h not factory locked.

WRITE COMMANDS/COMMAND SEQUENCES

To program data to the device or erase sectors of memory , the system must drive WE and CE to VIL, and OE to VIH.An erase operation can erase one sector, multiple sectors , or the entire device. A "sector address" consists of the address bits required to uniquely select a sector. Writing specific address and data commands or sequences into the command register initiates device operations. Table A defines the valid register command sequences. Writing incorrect address and data values or writing them in the improper sequence resets the device to reading array data. Section has details on erasing a sector or the entire chip, or suspending/resuming the erase operation.

After the system writes the Automatic Select command sequence, the device enters the Automatic Select mode. The system can then read Automatic Select codes from the internal register (which is separate from the memory array) on Q7-Q0. Standard read cycle timings apply in this mode. Refer to the Automatic Select Mode and Automatic Select Command Sequence section for more information.ICC2 in the DC Characteristics table represents the active current specification for the write mode. The "AC Characteristics" section contains timing specification table and timing diagrams for write operations.

TABLE A. MX29LV320AT/B COMMAND DEFINITIONS

Command		Bus Cycles	First Bus Cycle		Second Bus Cycle		Third Bus Cycle		Fourth Bus Cycle		Fifth Bus Cycle		Sixth Bus Cycle	
			Addr	Data	Addr	Data	Addr	Data	Addr	Data	Addr	Data	Addr	Data
Read(Note 5)		1	RA	RD										
Reset(Note 4)		1	XXX	F0										
Automatic Select(Note 5)														
Manufacturer ID	Word	4	555	AA	2AA	55	555	90	X00	C2H				
	Byte	4	AAA	AA	555	55	AAA	90	X00	C2H				
Device ID	Word	4	555	AA	2AA	55	555	90	X01	ID				
	Byte	4	AAA	AA	555	55	AAA	90	X02					
Security Sector Factory	Word	4	555	AA	2AA	55	555	90	X03	99/19				
Protect Verify (Note 6)	Byte	4	AAA	AA	555	55	AAA	90	X06					
Sector Protect Verify	Word	4	555	AA	2AA	55	555	90	(SA)X02	00/01				
(Note 7)	Byte	4	AAA	AA	555	55	AAA	90	(SA)X04					
Enter Security Sector	Word	3	555	AA	2AA	55	555	88						
Region	Byte	3	AAA	AA	555	55	AAA	88						
Exit Security Sector	Word	4	555	AA	2AA	55	555	90	XXX	00				
	Byte	4	AAA	AA	555	55	AAA	90	XXX	00				
Program	Word	4	555	AA	2AA	55	555	A0	PA	PD				
	Byte	4	AAA	AA	555	55	AAA	A0	PA	PD				
Chip Erase	Word	6	555	AA	2AA	55	555	80	555	AA	2AA	55	555	10
	Byte	6	AAA	AA	555	55	AAA	80	AAA	AA	555	55	AAA	10
Sector Erase	Word	6	555	AA	2AA	55	555	80	555	AA	2AA	55	SA	30
	Byte	6	AAA	AA	555	55	AAA	80	AAA	AA	555	55	SA	30
CFI Query (Note 8)	Word	1	55	98										
	Byte	1	AA	98										
Erase Suspend(Note 9)		1	SA	B0										
Erase Resume(Note 10)		1	SA	30										

Legend:

X=Don't care
RA=Address of the memory location to be read.
RD=Data read from location RA during read operation.
PA=Address of the memory location to be programmed.
Addresses are latched on the falling edge of the WE or CE pulse.
PD=Data to be programmed at location PA. Data is latched on the rising edge of WE or CE pulse.
SA=Address of the sector to be erased or verified. Address bits A20-A12 uniquely select any sector.
ID=22A7h(Top), 22A8h(Bottom)

Notes:

1.All values are in hexadecimal.
2.Except when reading array or Automatic Select data, all bus cycles are write operation.
3.The Reset command is required to return to the read mode when the device is in the Automatic Select mode or if Q5 goes high.
4.The fourth cycle of the Automatic Select command sequence is a read cycle.
5.The data is 99h for factory locked and 19h for not factory locked.
6.The data is 00h for an unprotected sector/sector block and 01h for a protected sector/sector block. In the third cycle of the command sequence, address bit A20=0 to verify sectors 0~31, A20=1 to verify sectors 32~70 for Top Boot device.
7.Command is valid when device is ready to read array data or when device is in Automatic Select mode.
8.The system may read and program functions in non-erasing sectors, or enter the Automatic Select mode, when in the erase Suspend mode. The Erase Suspend command is valid only during a sector erase operation.
9.The Erase Resume command is valid only during the Erase Suspend mode.

STANDBY MODE

MX29LV320AT/B can be set into Standby mode with two different approaches. One is using both CE and RESET pins and the other one is using RESET pin only.

When using both pins of CE and RESET, a CMOS Standby mode is achieved with both pins held at Vcc ±0.3V. Under this condition, the current consumed is less than 0.2uA (typ.). If both of the CE and RESET are held at VIH, but not within the range of VCC ± 0.3V, the device will still be in the standby mode, but the standby current will be larger. During Auto Algorithm operation, Vcc active current (ICC2) is required even CE = "H" until the operation is completed. The device can be read with standard access time (tCE) from either of these standby modes.

When using only RESET, a CMOS standby mode is achieved with RESET input held at Vss ± 0.3V, Under this condition the current is consumed less than 1uA (typ.). Once the RESET pin is taken high, the device is back to active without recovery delay.In the standby mode the outputs are in the high impedance state, independent of the OE input.MX29LV320AT/B is capable to provide the Automatic Standby Mode to restrain power consumption during readout of data. This mode can be used effectively with an application requested low power consumption such as handy terminals.

To active this mode, MX29LV320AT/B automatically switch themselves to low power mode when MX29LV320AT/B addresses remain stable during access time of tACC+30ns. It is not necessary to control CE, WE, and OE on the mode. Under the mode, the current consumed is typically 0.2uA (CMOS level).

RESET OPERATION

01The RESET pin provides a hardware method of resetting the device to reading array data. When the RESET pin is driven low for at least a period of tRP, the device immediately terminates any operation in progress, tristates all output pins, and ignores all read/write commands for the duration of the RESET pulse. The device also resets the internal state machine to reading array data. The operation that was interrupted should be reinitiated once the device is ready to accept another command sequence, to ensure data integrity.

Current is reduced for the duration of the RESET pulse. When RESET is held at VSS±0.3V, the device draws CMOS standby current (ICC4). If RESET is held at VIL but not within VSS±0.3V, the standby current will be greater.The RESET pin may be tied to system reset circuitry. A system reset would that also reset the Flash memory, enabling the system to read the boot-up firm-ware from the Flash memory.

If RESET is asserted during a program or erase operation, the RY/BY pin remains a "0" (busy) until the internal reset operation is complete, which requires a time of tREADY (during Embedded Algorithms). The system can thus monitor RY/BY to determine whether the reset operation is complete. If RESET is asserted when a program or erase operation is not executing (RY/BY pin is "1"), the reset operation is completed within a time of tREADY (not during Embedded Algorithms). The system can read data tRH after the RESET pin returns to VIH. Refer to the AC Characteristics tables for RESET parameters and to Figure 14 for the timing diagram.

WRITE PROTECT (WP)

The write protect function provides a hardware method to protect boot sectors without using VID. If the system asserts VIL on the WP/ACC pin, the device disables program and erase functions in the two "outermost" 8 Kbyte boot sectors independently of whether those sectors were protected or unprotected using the method described in Sector/Sector Group Protection and Chip Unprotection". The two outermost 8 Kbyte boot sectors are the two sectors containing the lowest addresses in a bottom-boot-configured device, or the two sectors containing the highest addresses in a top-boot-configured device.

If the system asserts VIH on the WP/ACC pin, the device reverts to whether the two outermost 8K Byte boot sectors were last set to be protected or unprotected. That is, sector protection or unprotection for these two sectors depends on whether they were last protected or unprotected using the method described in "Sector/Sector Group Protection and Chip Unprotection".

Note that the WP/ACC pin must not be left floating or unconnected; inconsistent behavior of the device may result.

SOFTWARE COMMAND DEFINITIONS :

Device operations are selected by writing specific address and data sequences into the command register. Writing incorrect address and data values or writing them in the improper sequence will reset the device to the read mode. Table 3 defines the valid register command sequences. Note that the Erase Suspend (B0H) and Erase Resume (30H) commands are valid only while the Sector Erase operation is in progress. Either of the two reset command sequences will reset the device (whenapplicable).

All addresses are latched on the falling edge of WE or CE, whichever happens later. All data are latched on rising edge of WE or CE, whichever happens first.

WRITE OPERATION STATUS

The device provides several bits to determine the status of a write operation: Q2, Q3, Q5, Q6, Q7, and RY/BY.Table B and the following subsections describe the functions of these bits. Q7, RY/BY, and Q6 each offer a method for determining whether a program or erase operation is complete or in progress. These three bits are discussed first.

Table B. Write Operation Status

	Status		Q7 Note1	Q6	Q5 Note2	Q3	Q2	RY/$\overline{BY}$
In Progress	Byte/Word Program in Auto Program Algorithm		$\overline{Q7}$	Toggle	0	N/A	No Toggle	0
	Auto Erase Algorithm		0	Toggle	0	1	Toggle	0
	Erase Suspended Mode	Erase Suspend Read (Erase Suspended Sector)	1	No Toggle	0	N/A	Toggle	1
		Erase Suspend Read (Non-Erase Suspended Sector)	Data	Data	Data	Data	Data	1
		Erase Suspend Program	$\overline{Q7}$	Toggle	0	N/A	N/A	0
Exceeded Time Limits	Byte/Word Program in Auto Program Algorithm		$\overline{Q7}$	Toggle	1	N/A	No Toggle	0
	Auto Erase Algorithm		0	Toggle	1	1	Toggle	0
	Erase Suspend Program		$\overline{Q7}$	Toggle	1	N/A	N/A	0

Notes:

1.Performing successive read operations from the erase-suspended sector will cause Q2 to toggle.

2.Performing successive read operations from any address will cause Q6 to toggle.

3.Reading the byte/word address being programmed while in the erase-suspend program mode will indicate logic "1" at the Q2 bit.
However, successive reads from the erase-suspended sector will cause Q2 to toggle.

Fig C. COMMAND WRITE OPERATION

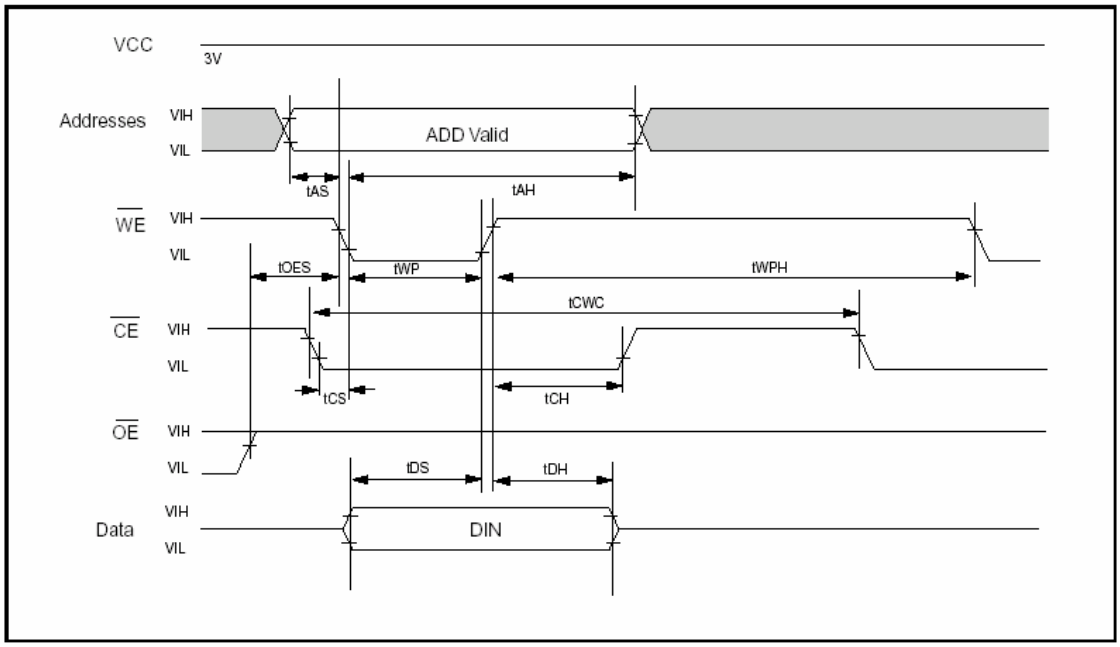
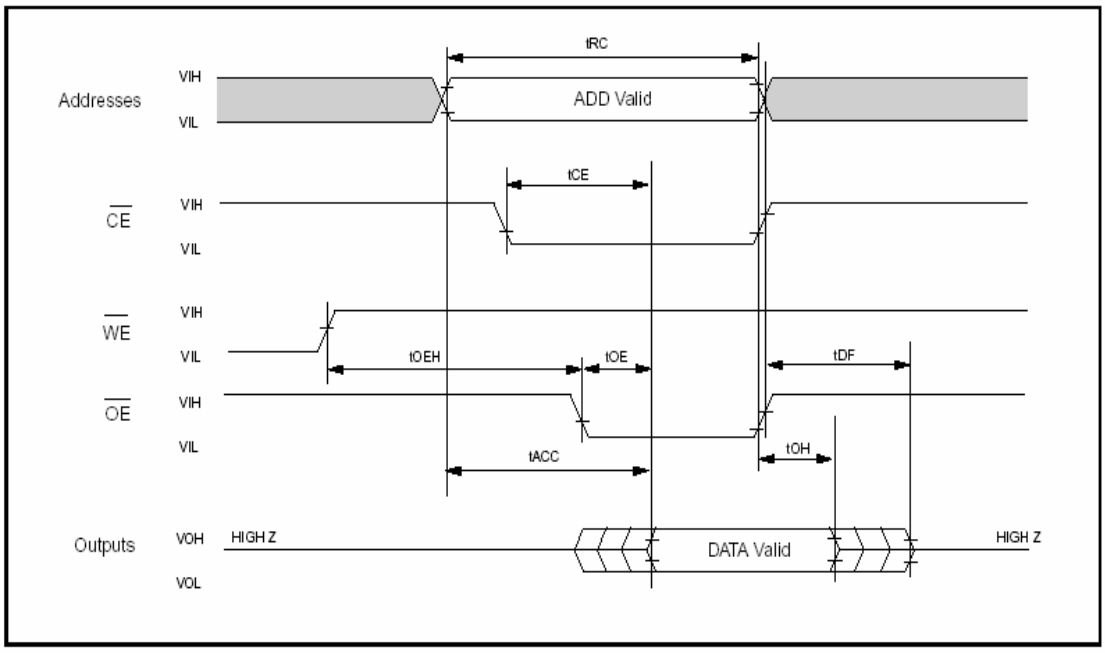


Fig D. READ TIMING WAVEFORMS

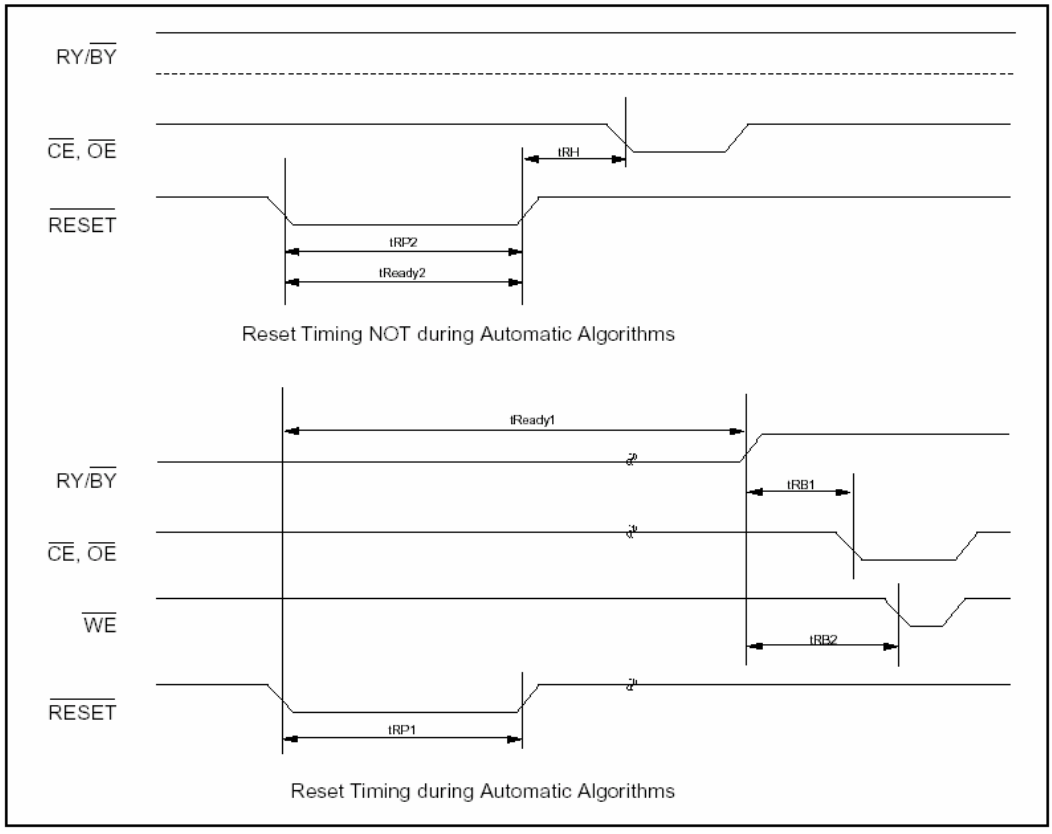


AC CHARACTERISTICS

Parameter	Description	Test Setup	All Speed Options	Unit
tREADY1	$\overline{\text{RESET}}$ PIN Low (During Automatic Algorithms) to Read or Write (See Note)	MAX	20	us
tREADY2	$\overline{\text{RESET}}$ PIN Low (NOT During Automatic Algorithms) to Read or Write (See Note)	MAX	500	ns
tRP1	$\overline{\text{RESET}}$ Pulse Width (During Automatic Algorithms)	MIN	10	us
tRP2	$\overline{\text{RESET}}$ Pulse Width (NOT During Automatic Algorithms)	MIN	500	ns
tRH	$\overline{\text{RESET}}$ High Time Before Read(See Note)	MIN	70	ns
tRB1	RY/$\overline{\text{BY}}$ Recovery Time(to $\overline{\text{CE}}$, $\overline{\text{OE}}$ go low)	MIN	0	ns
tRB2	RY/$\overline{\text{BY}}$ Recovery Time(to $\overline{\text{WE}}$ go low)	MIN	50	ns

Note:Not 100% tested

Fig E. RESET TIMING WAVEFORM

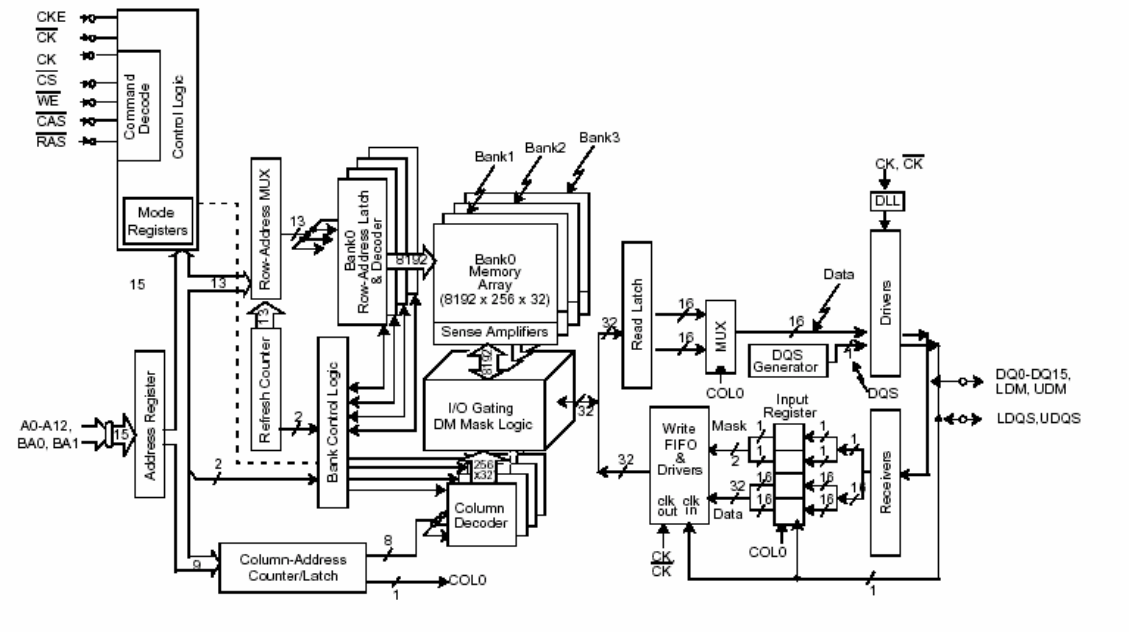


DDR SDRAM (NT5DS16M16CS-5T) Application:

Functional Description

The 256Mb DDR SDRAM is a high-speed CMOS, dynamic random-access memory containing 268, 435, 456 bits. The 256Mb DDR SDRAM is internally configured as a quad-bank DRAM. The 256Mb DDR SDRAM uses a double-data-rate architecture to achieve high-speed operation. The double-data-rate architecture is essentially a *2n* prefetch architecture, with an interface designed to transfer two data words per clock cycle at the I/O pins. A single read or write access for the 256Mb DDR SDRAM consists of a single *2n*-bit wide, one clock cycle data transfer at the internal DRAM core and two corresponding n-bit wide, one-half clock cycle data transfers at the I/O pins. Read and write accesses to the DDR SDRAM are burst oriented; accesses start at a selected location and continue for a programmed number of locations in a programmed sequence. Accesses begin with the registration of an Active command, which is then followed by a Read or Write command. The address bits registered coincident with the Active command are used to select the bank and row to be accessed (BA0, BA1 select the bank; A0-A12 select the row). The address bits registered coincident with the Read or Write command are used to select the starting column location for the burst access.Prior to normal operation, the DDR SDRAM must be initialized. The following sections provide detailed information covering device initialization, register definition, command descriptions and device operation.

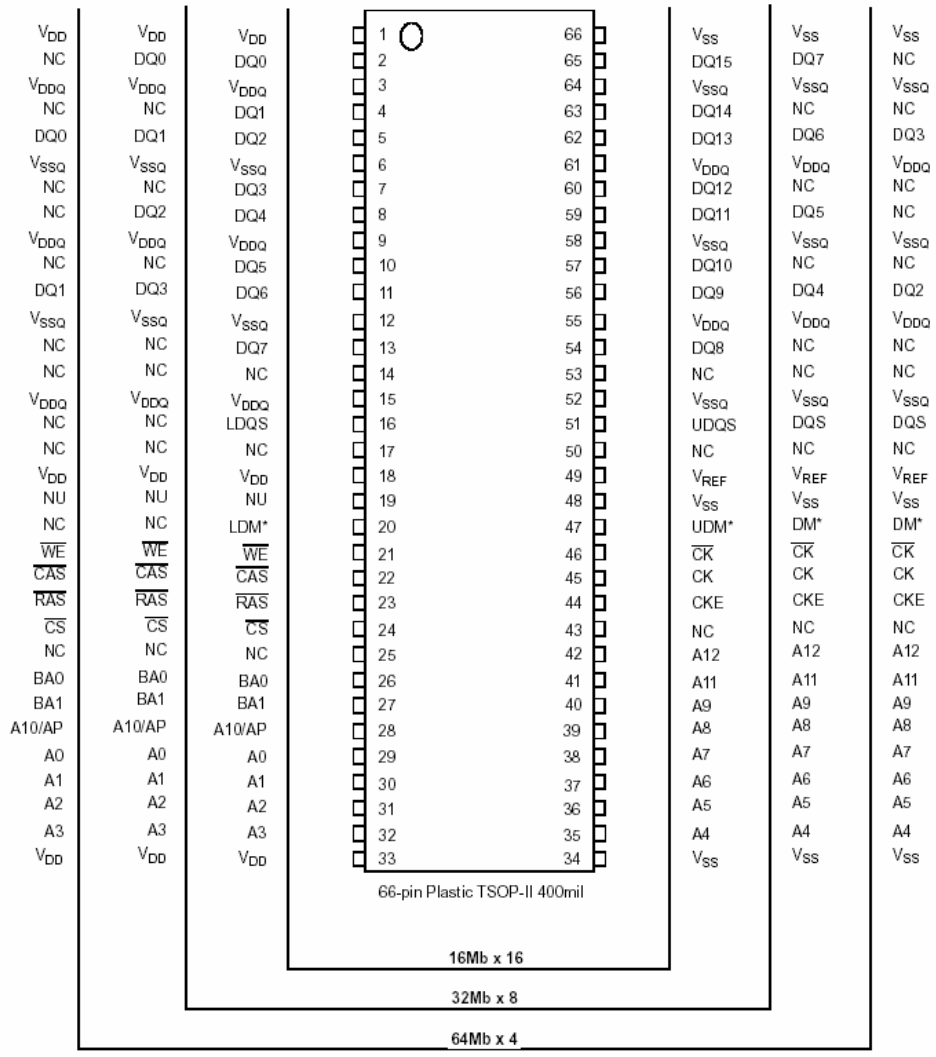
Block Diagram (16Mb x 16)



Note: This Functional Block Diagram is intended to facilitate user understanding of the operation of the device; it does not represent an actual circuit implementation.

Note: DM is a unidirectional signal (input only), but is internally loaded to match the load of the bidirectional DQ and DQS signals.

Pin Configuration - 400mil TSOP II (x4 / x8 / x16)

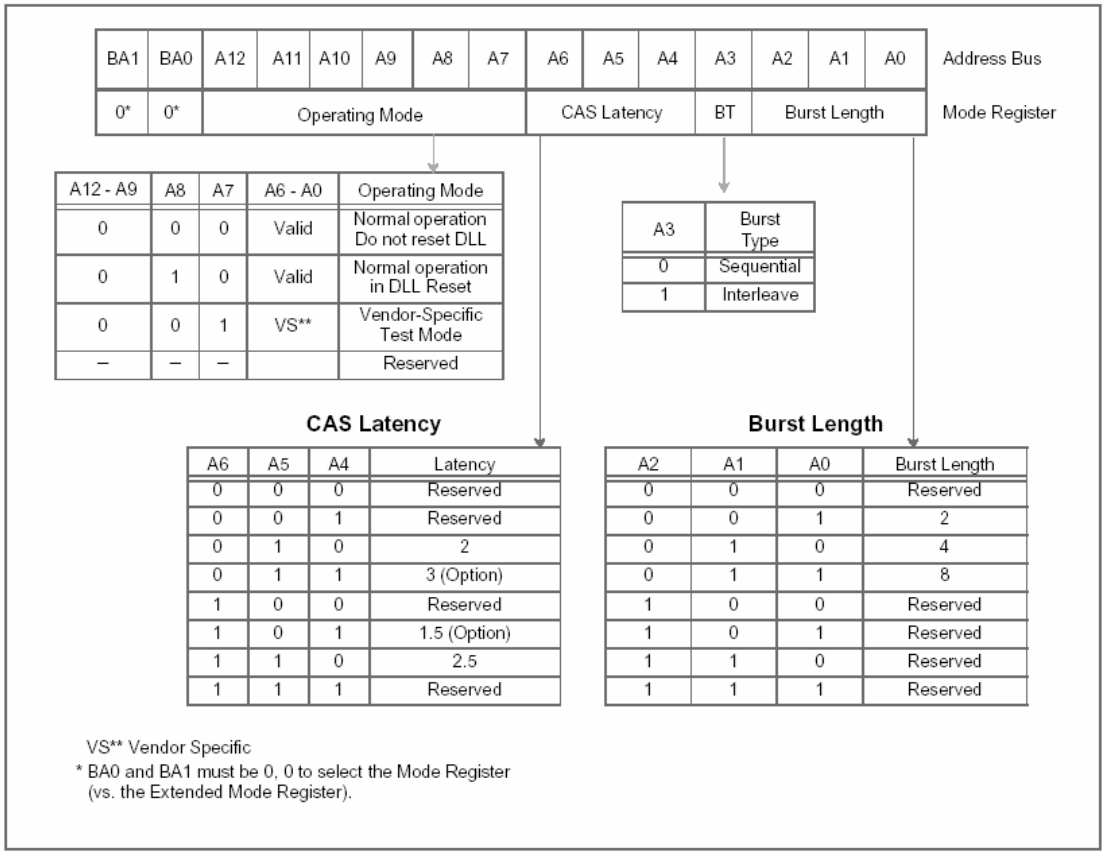


Column Address Table

Organization	Column Address
64Mb x 4	A0-A9, A11
32Mb x 8	A0-A9
16Mb x 16	A0-A8

*DM is internally loaded to match DQ and DQS identically.

Mode Register Operation



BA1	BA0	A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1	A0	
0*	0*	Operating Mode						CAS Latency			BT	Burst Length			Mode Register

A12 - A9	A8	A7	A6 - A0	Operating Mode
0	0	0	Valid	Normal operation Do not reset DLL
0	1	0	Valid	Normal operation in DLL Reset
0	0	1	VS**	Vendor-Specific Test Mode
–	–	–		Reserved

A3	Burst Type
0	Sequential
1	Interleave

CAS Latency

A6	A5	A4	Latency
0	0	0	Reserved
0	0	1	Reserved
0	1	0	2
0	1	1	3 (Option)
1	0	0	Reserved
1	0	1	1.5 (Option)
1	1	0	2.5
1	1	1	Reserved

Burst Length

A2	A1	A0	Burst Length
0	0	0	Reserved
0	0	1	2
0	1	0	4
0	1	1	8
1	0	0	Reserved
1	0	1	Reserved
1	1	0	Reserved
1	1	1	Reserved

VS** Vendor Specific

* BA0 and BA1 must be 0, 0 to select the Mode Register (vs. the Extended Mode Register).

Operating Mode

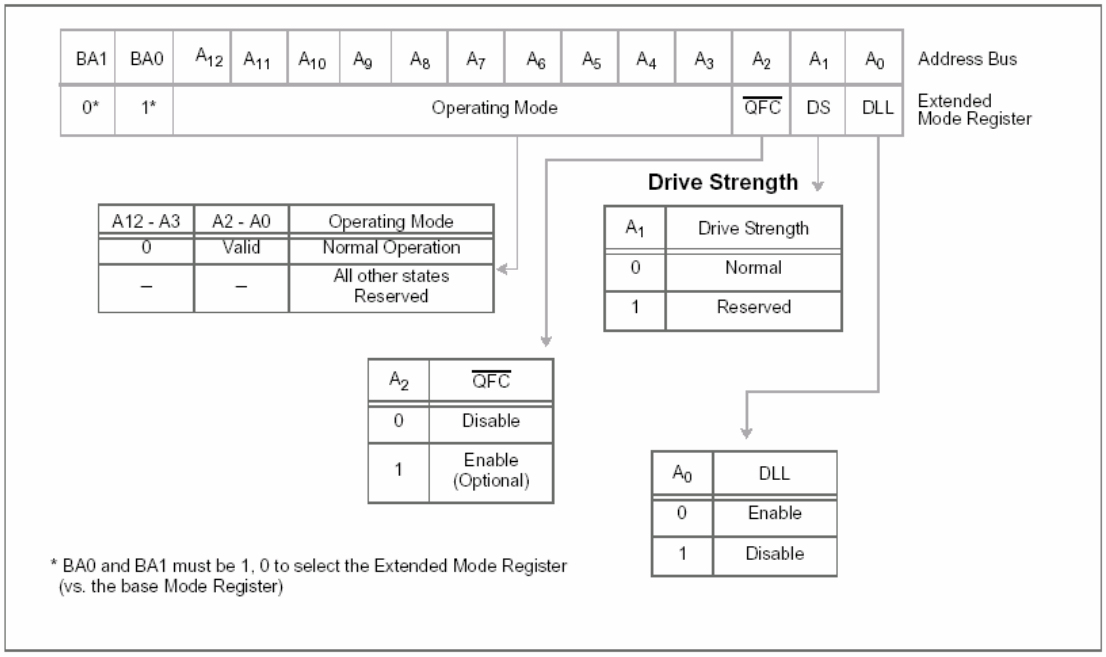
The normal operating mode is selected by issuing a Mode Register Set Command with bits A7-A12 to zero, and bits A0-A6 set to the desired values. A DLL reset is initiated by issuing a Mode Register Set command with bits A7 and A9-A12 each set to zero, bit A8 set to one, and bits A0-A6 set to the desired values. A Mode Register Set command issued to reset the DLL should always be followed by a Mode Register Set command to select normal operating mode.

All other combinations of values for A7-A12 are reserved for future use and/or test modes. Test modes and reserved states should not be used as unknown operation or incompatibility with future versions may result.

Extended Mode Register

The Extended Mode Register controls functions beyond those controlled by the Mode Register; these additional functions include DLL enable/disable, bit A0; output drive strength selection, bit A1; and QFC output enable/disable, bit A2 (NTC optional). These functions are controlled via the bit settings shown in the Extended Mode Register Definition. The Extended Mode Register is programmed via the Mode Register Set command (with BA0 = 1 and BA1 = 0) and retains the stored information until it is programmed again or the device loses power. The Extended Mode Register must be loaded when all banks are idle, and the controller must wait the specified time before initiating any subsequent operation. Violating either of these requirements result in unspecified operation.

Extended Mode Register Definition



Truth Table a: Commands

Name (Function)	$\overline{CS}$	$\overline{RAS}$	$\overline{CAS}$	$\overline{WE}$	Address	MNE	Notes
Deselect (Nop)	H	X	X	X	X	NOP	1, 9
No Operation (Nop)	L	H	H	H	X	NOP	1, 9
Active (Select Bank And Activate Row)	L	L	H	H	Bank/Row	ACT	1, 3
Read (Select Bank And Column, And Start Read Burst)	L	H	L	H	Bank/Col	Read	1, 4
Write (Select Bank And Column, And Start Write Burst)	L	H	L	L	Bank/Col	Write	1, 4
Burst Terminate	L	H	H	L	X	BST	1, 8
Precharge (Deactivate Row In Bank Or Banks)	L	L	H	L	Code	PRE	1, 5
Auto Refresh Or Self Refresh (Enter Self Refresh Mode)	L	L	L	H	X	AR / SR	1, 6, 7
Mode Register Set	L	L	L	L	Op-Code	MRS	1, 2

1. CKE is high for all commands shown except Self Refresh.
2. BA0, BA1 select either the Base or the Extended Mode Register (BA0 = 0, BA1 = 0 selects Mode Register; BA0 = 1, BA1 = 0 selects ,Extended Mode Register; other combinations of BA0-BA1 are reserved; A0-A12 provide the op-code to be written to the selected Mode Register.)
3. BA0-BA1 provide bank address and A0-A12 provide row address.
4. BA0, BA1 provide bank address; A0-A*i* provide column address (where *i* = 9 for x8 and 9, 11 for x4); A10 high enables the Auto Precharge feature (non-persistent), A10 low disables the Auto Precharge feature.
5. A10 LOW: BA0, BA1 determine which bank is precharged.A10 HIGH: all banks are precharged and BA0, BA1 are “Don’t Care.”
6. This command is auto refresh if CKE is high; Self Refresh if CKE is low.
7. Internal refresh counter controls row and bank addressing; all inputs and I/Os are “Don’t Care” except for CKE.
8. Applies only to read bursts with Auto Precharge disabled; this command is undefined (and should not be used) for read bursts with Auto Precharge enabled or for write bursts
9. Deselect and NOP are functionally interchangeable.

Active

The Active command is used to open (or activate) a row in a particular bank for a subsequent access. The value on the BA0,BA1 inputs selects the bank, and the address provided on inputs A0-A12 selects the row. This row remains active (or open) for accesses until a Precharge (or Read or Write with Auto Precharge) is issued to that bank. A Precharge (or Read or Write with Auto Precharge) command must be issued and completed before opening a different row in the same bank.

Read

The Read command is used to initiate a burst read access to an active (open) row. The value on the BA0, BA1 inputs selects the bank, and the address provided on inputs A0-Ai, Aj (where [i = 9, j = don't care] for x8; where [i = 9, j = 11] for x4) selects the starting column location. The value on input A10 determines whether or not Auto Precharge is used. If Auto Precharge is selected, the row being accessed is precharged at the end of the Read burst; if Auto Precharge is not selected, the row remains open for subsequent accesses.

Write

The Write command is used to initiate a burst write access to an active (open) row. The value on the BA0, BA1 inputs selects the bank, and the address provided on inputs A0-Ai, Aj (where [i = 9, j = don't care] for x8; where [i = 9, j = 11] for x4) selects the starting column location. The value on input A10 determines whether or not Auto Precharge is used. If Auto Precharge is selected, the row being accessed is precharged at the end of the Write burst; if Auto Precharge is not selected, the row remains open for subsequent accesses. Input data appearing on the DQs is written to the memory array subject to the DM input logic level appearing coincident with the data. If a given DM signal is registered low, the corresponding data is written to memory; if the DM signal is registered high, the corresponding data inputs are ignored, and a Write is not executed to that byte/column location.

Auto Refresh

Auto Refresh is used during normal operation of the DDR SDRAM and is analogous to CAS Before RAS (CBR) Refresh in previous DRAM types. This command is nonpersistent, so it must be issued each time a refresh is required.The refresh addressing is generated by the internal refresh controller. This makes the address bits "Don't Care" during an Auto Refresh command. The 256Mb DDR SDRAM requires Auto Refresh cycles at an average periodic interval of 7.8 μs (maximum).

Self Refresh

The Self Refresh command can be used to retain data in the DDR SDRAM, even if the rest of the system is powered down.When in the self refresh mode, the DDR SDRAM retains data without external clocking. The Self Refresh command is initiated as an Auto Refresh command coincident with CKE transitioning low. The DLL is automatically disabled upon entering Self Refresh, and is automatically enabled upon exiting Self Refresh (200 clock cycles must then occur before a Read command can be issued). Input signals except CKE (low) are “Don’t Care” during Self Refresh operation.

The procedure for exiting self refresh requires a sequence of commands. CK (and CK) must be stable prior to CKE returning high. Once CKE is high, the SDRAM must have NOP commands issued for tXSNR because time is required for the completion of any internal refresh in progress. A simple algorithm for meeting both refresh and DLL requirements is to apply NOPs for 200 clock cycles before applying any other command.

Operations:

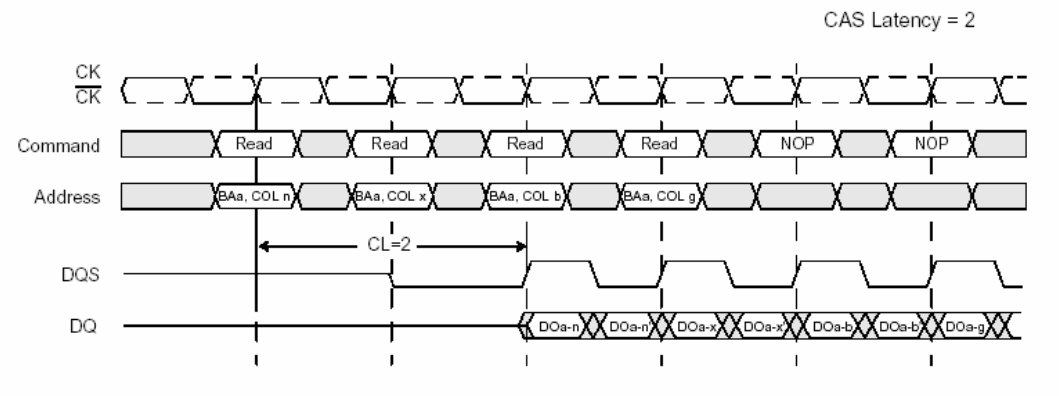
Reads

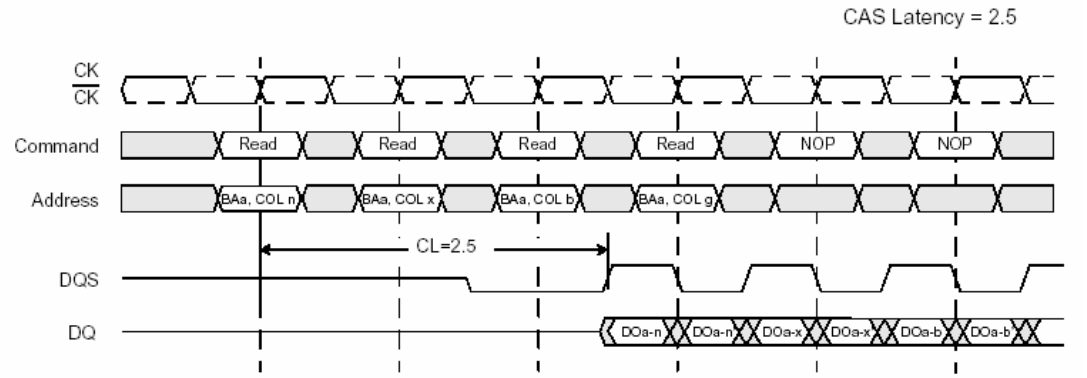
Subsequent to programming the mode register with CAS latency, burst type, and burst length, Read bursts are initiated with a Read command.

The starting column and bank addresses are provided with the Read command and Auto Precharge is either enabled or disabled for that burst access. If Auto Precharge is enabled, the row that is accessed starts precharge at the completion of the burst, provided tRAS has been satisfied. For the generic Read commands used in the following illustrations, Auto Precharge is disabled.

During Read bursts, the valid data-out element from the starting column address is available following the CAS latency after the Read command. Each subsequent data-out element is valid nominally at the next positive or negative clock edge (i.e. at the next crossing of CK and CK). The following timing figure entitled “Read Burst: CAS Latencies (Burst Length=4)” illustrates the general timing for each supported CAS latency setting. DQS is driven by the DDR SDRAM along with output data. The initial low state on DQS is known as the read preamble; the low state coincident with the last data-out element is known as the read postamble . Upon completion of a burst, assuming no other commands have been initiated, the DQs and DQS goes High-Z. Data from any Read burst may be concatenated with or truncated with data from a subsequent Read command. In either case, a continuous flow of data can be maintained. The first data element from the new burst follows either the last element of a completed burst or the last desired data element of a longer burst which is being truncated. The new Read command should be issued x cycles after the first Read command, where x equals the number of desired data element pairs (pairs are required by the 2n prefetch architecture). This is shown in timing figure entitled “Consecutive Read Bursts: CAS Latencies (Burst Length =4 or 8)”.A Read command can be initiated on any positive clock cycle following a previous Read command. Nonconsecutive Read data is shown in timing figure entitled “Non-Consecutive Read Bursts: CAS Latencies (Burst Length = 4)”. Full-speed Random Read Accesses: CAS Latencies (Burst Length = 2, 4 or 8) within a page (or pages) can be performed as shown on following:

Random Read Accesses: CAS Latencies (Burst Length = 2, 4 or 8)

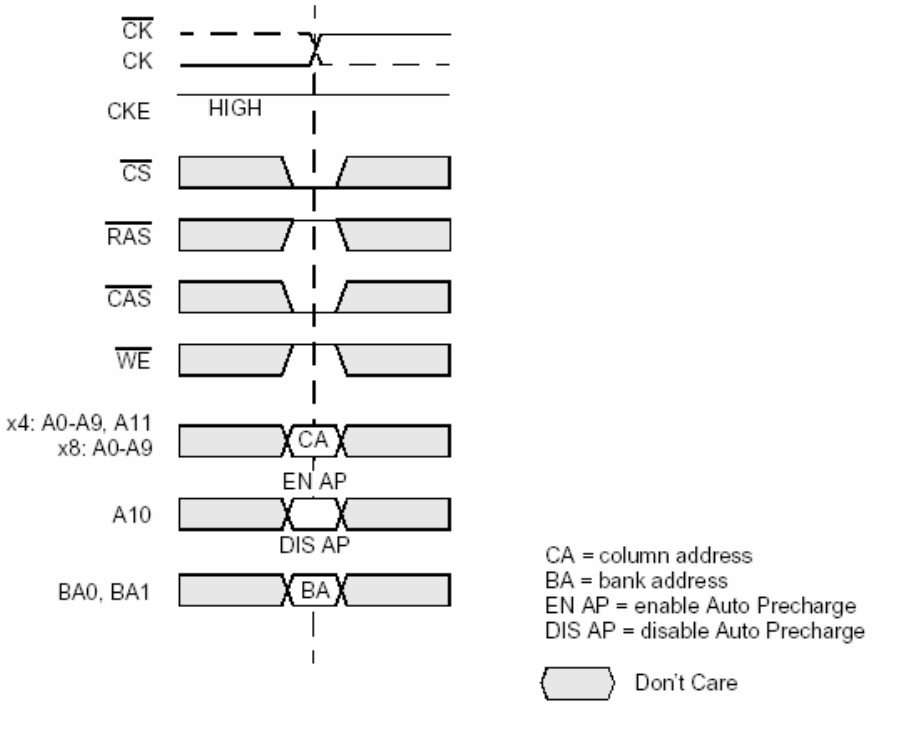




DO a-n, etc. = data out from bank a, column n etc.
n' etc. = odd or even complement of n, etc. (i.e., column address LSB inverted).
Reads are to active rows in any banks.
Shown with nominal t_{AC}, t_{DQSCK}, and t_{DQSQ}.

Don't Care

Read Command



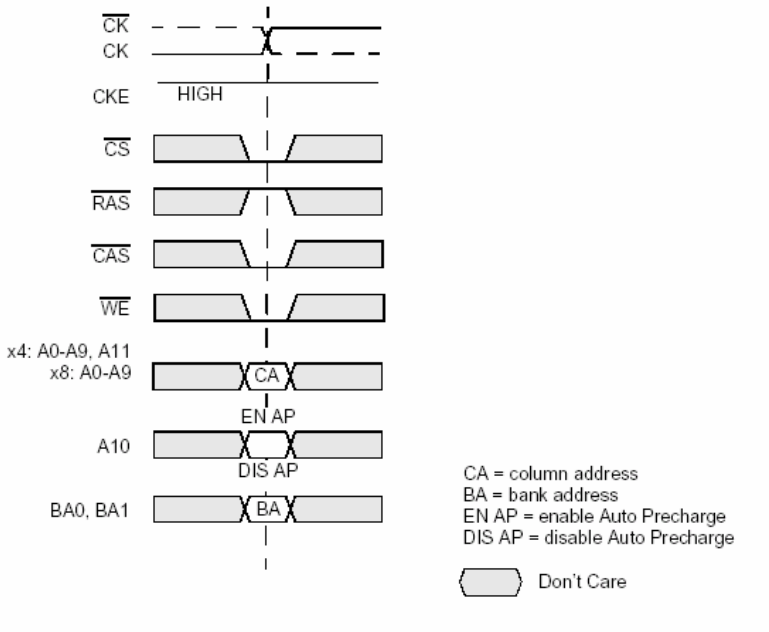
Writes

Write bursts are initiated with a Write command, as shown in timing figure *Write Command* on following: The starting column and bank addresses are provided with the Write command, and Auto Precharge is either enabled or disabled for that access. If Auto Precharge is enabled, the row being accessed is precharged at the completion of the burst.

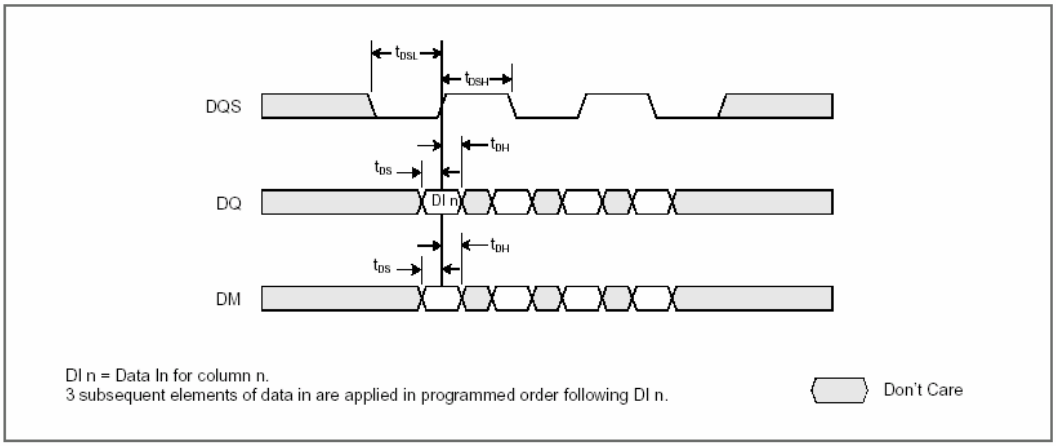
For the generic Write commands used in the following illustrations, Auto Precharge is disabled. During Write bursts, the first valid data-in element is registered on the first rising edge of DQS following the write command, and subsequent data elements are registered on successive edges of DQS. The Low state on DQS between the Write command and the first rising edge is known as the write preamble; the Low state on DQS following the last data-in element is known as the write postamble.

The time between the Write command and the first corresponding rising edge of DQS (tDQSS) is specified with a relatively wide range (from 75% to 125% of one clock cycle), so most of the Write diagrams that follow are drawn for the two extreme cases (i.e. tDQSS(min) and tDQSS(max)). Timing figure *Write Burst (Burst Length = 4)* on page 33 shows the two extremes of tDQSS for a burst of four. Upon completion of a burst, assuming no other commands have been initiated, the DQs and DQS enters High-Z and any additional input data is ignored.Data for any Write burst may be concatenated with or truncated with a subsequent Write command. In either case, a continuous flow of input data can be maintained. The new Write command can be issued on any positive edge of clock following the previous Write command. The first data element from the new burst is applied after either the last element of a completed burst or the last desired data element of a longer burst which is being truncated. The new Write command should be issued x cycles after the first Write command, where x equals the number of desired data element pairs (pairs are required by the 2n prefetch architecture).

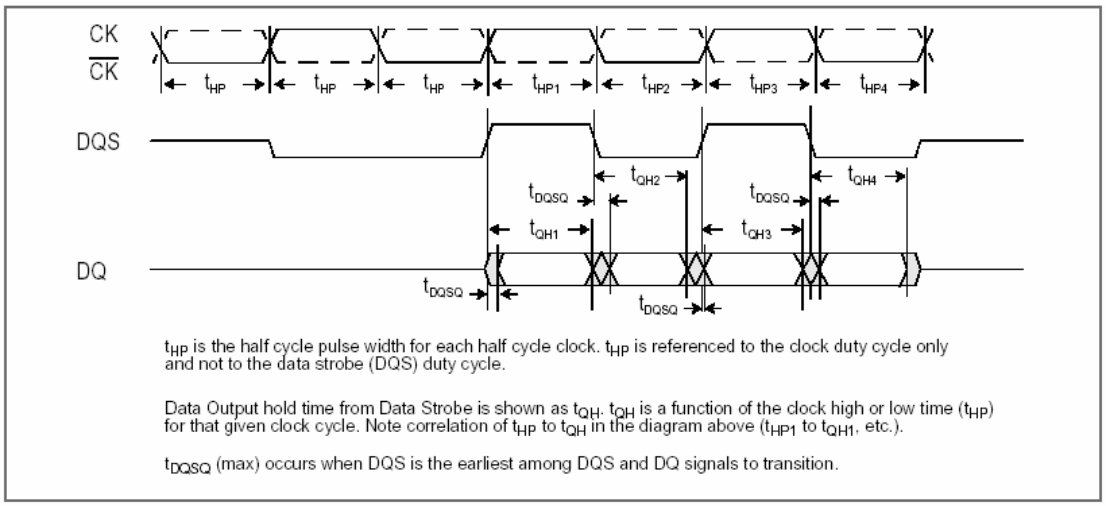
Write Command



Data Input (Write)



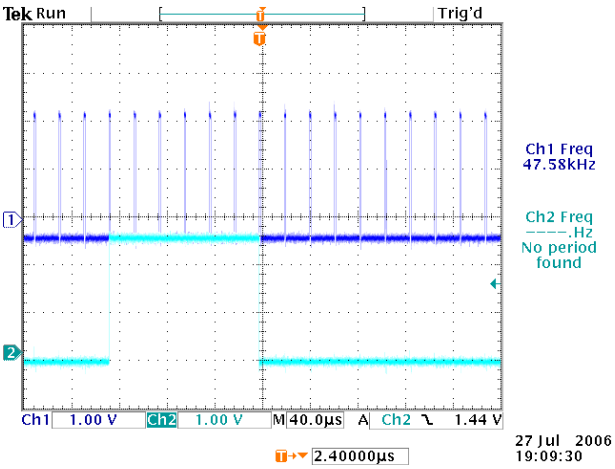
Data Output (Read)



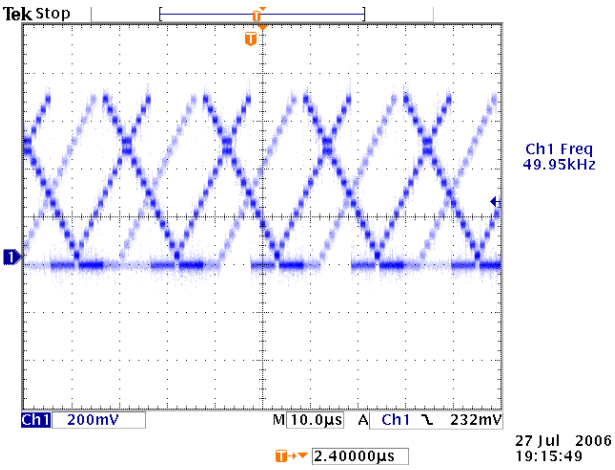
Chapter8 Waveforms

PC MODE(1366X768 60HZ)

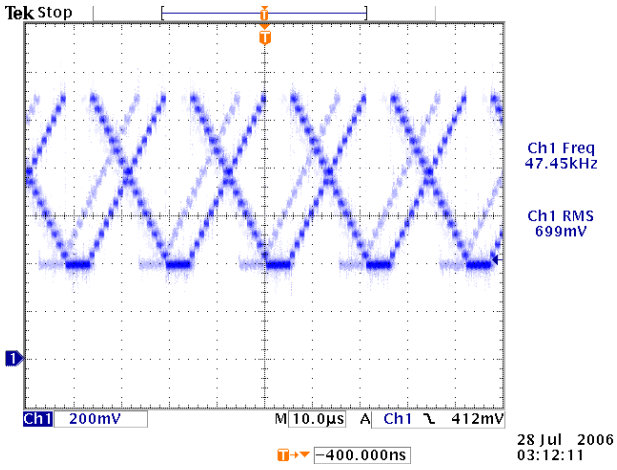
CH1 H-sync (L21); CH2 V-sync (L22)



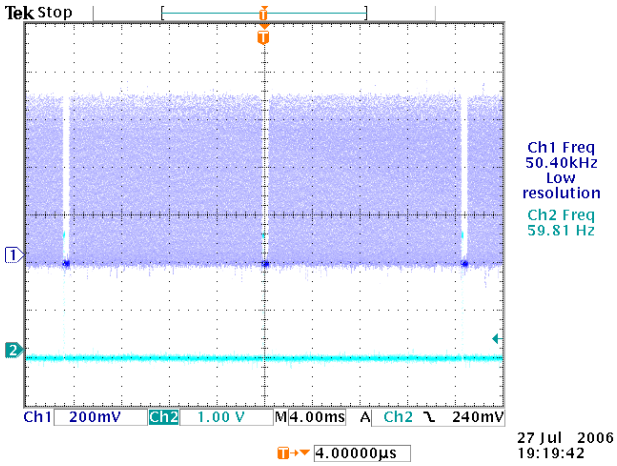
CH1 GREEN (FB27)



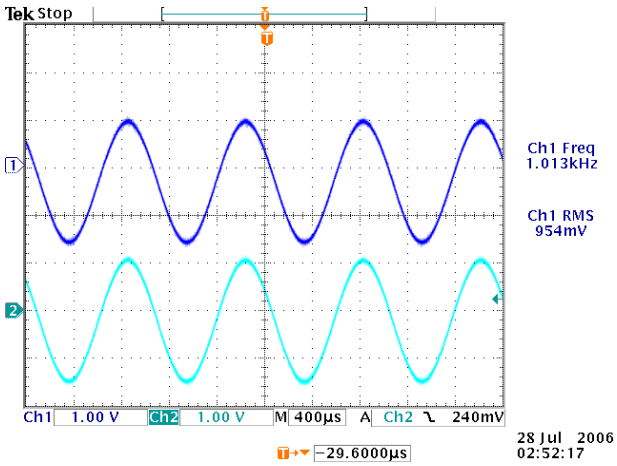
CH1 GREEN+(C294)



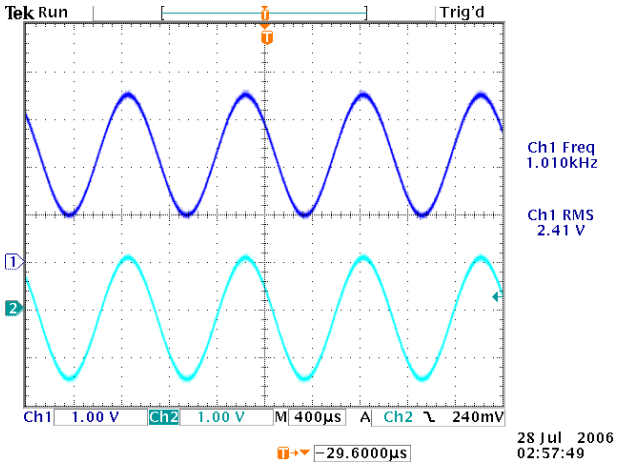
CH1 GREEN # (FB27); CH2 VGAVSYNC (L22)



CH1 VGAL (R193); CH2 AVOL (R194)

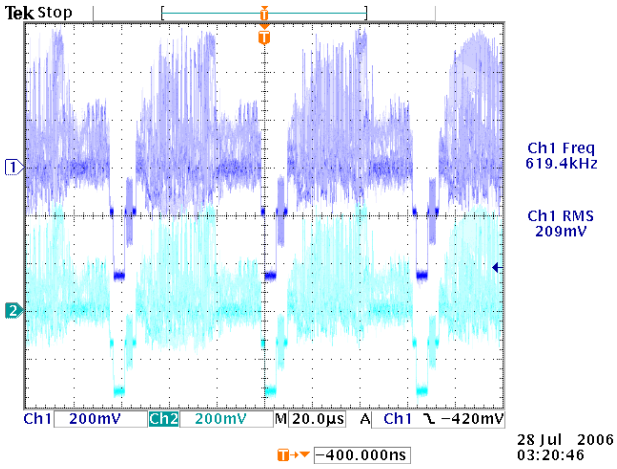


CH1 PC_L (CE70+) ; PC_L (CE70-)

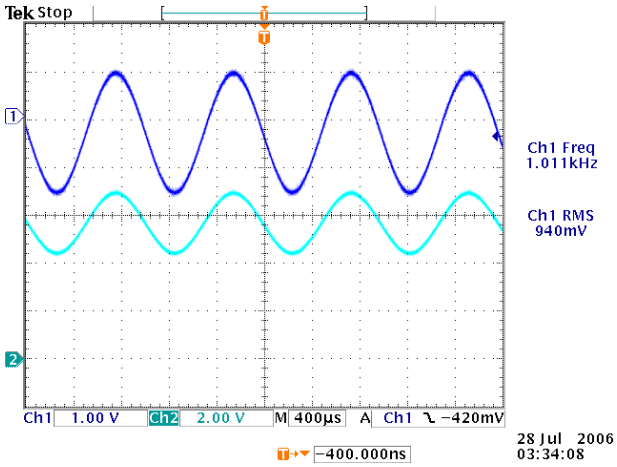


AV&TV MODE (AV1/AV2/TV) VIDEO

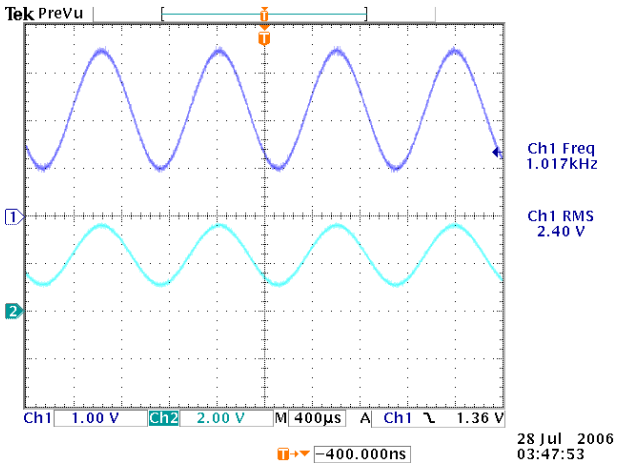
CH1 CVBS2 (R169); CH2 AV2CVBS (C255)



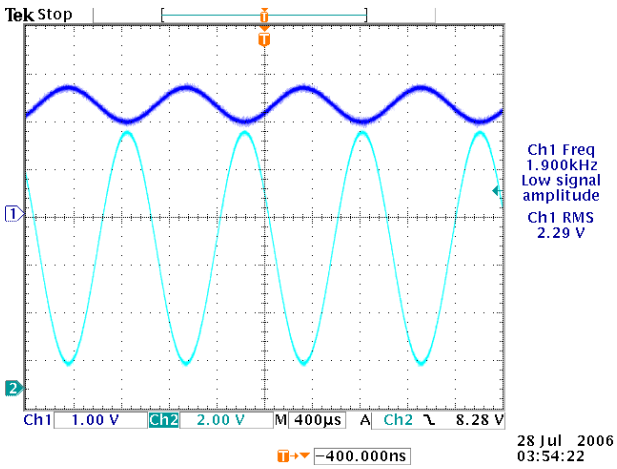
CH1 AV2L (R237); CH2 AV2L (U22 PIN14)



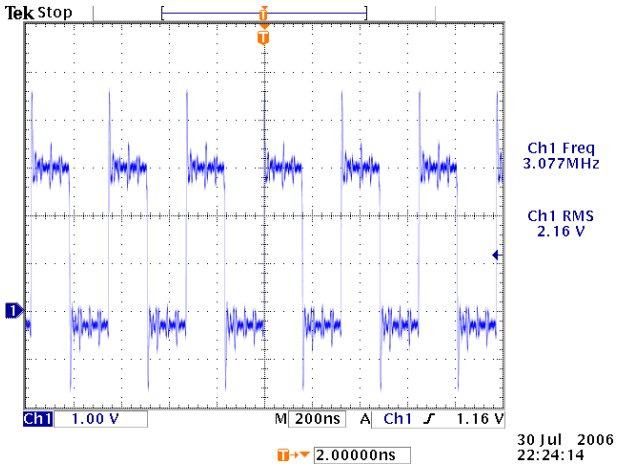
CH1 AV_L (U22 PIN13) ; CH2 AV_L (CE71-)



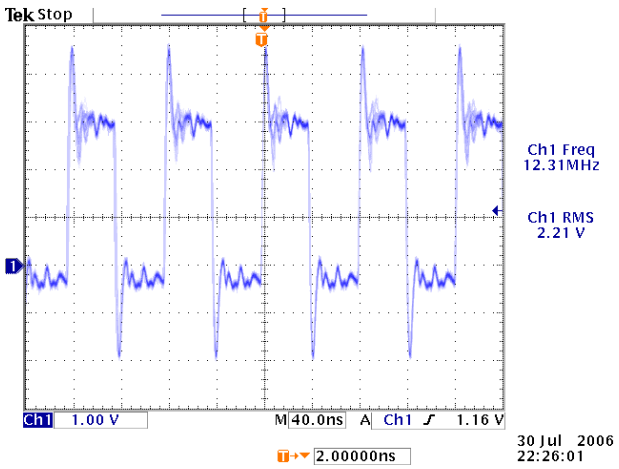
CH1 AUSPL (R302);CH2 OUT2+5(J4 PIN4)



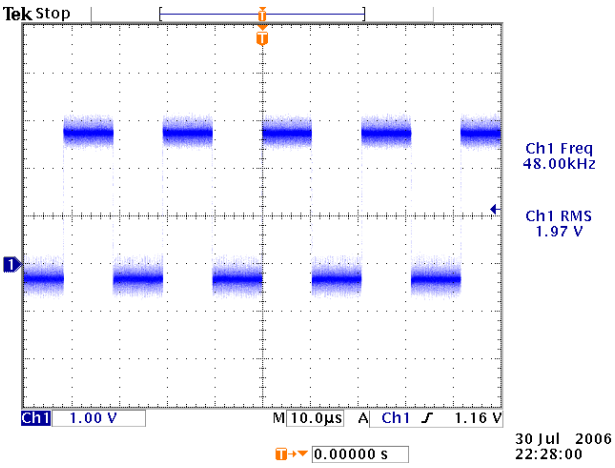
CH1 DACBCLK (U23 PIN4);



CH1 DACMCLK (U23 PIN5);

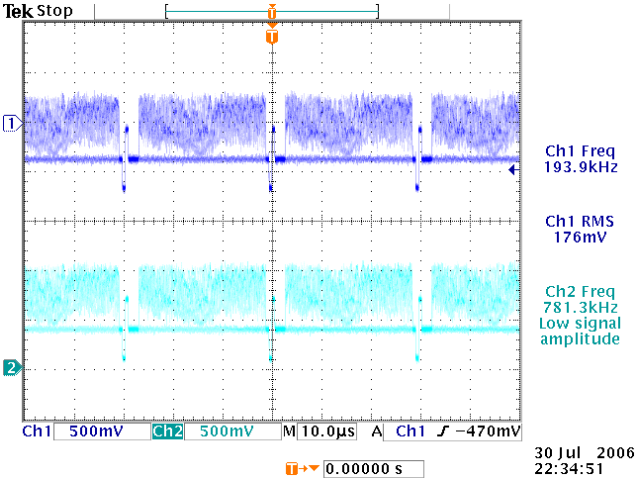


CH1 DACLRCK (U23 PIN7)

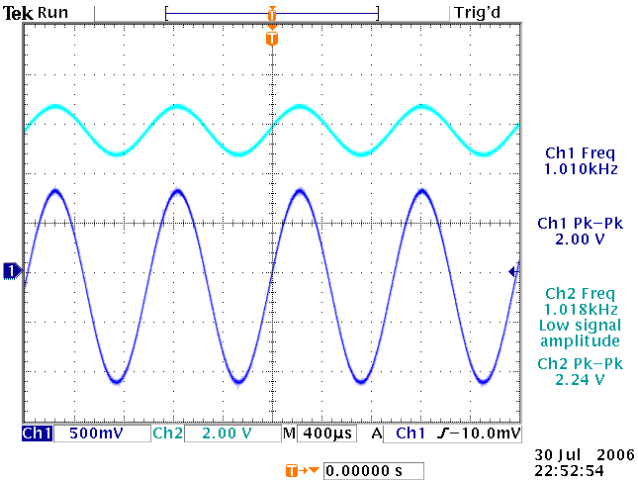


COMPONENT MODE (COMPONENT 1/2)

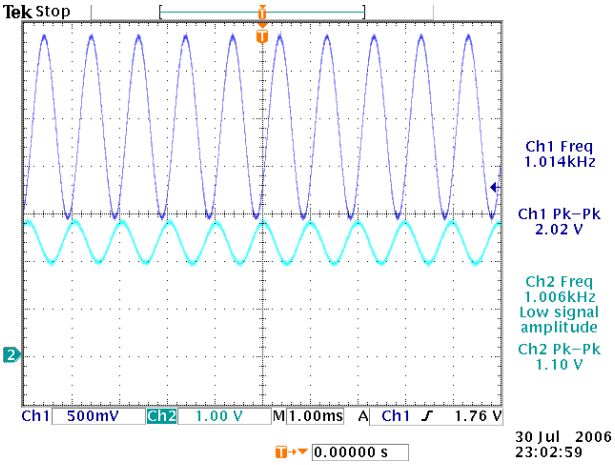
CH1 COM_Y2 (L16); CH2 AVY1P (C269)



CH1YCBCR_L2(L19) CH2 2A33 (U22 PIN11)

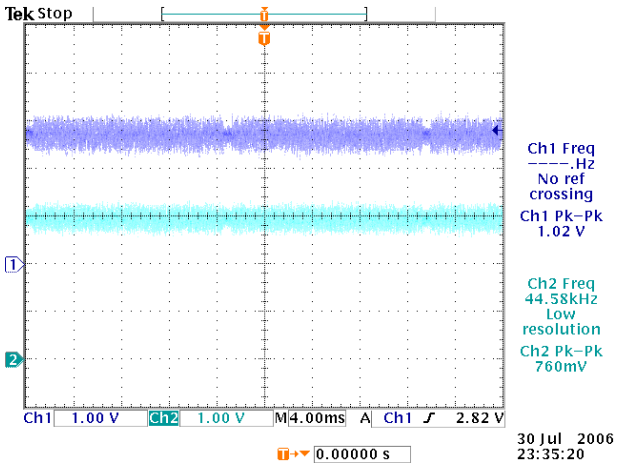


CH1 AV_L (CE71+);CH2 AUSPL (R304)

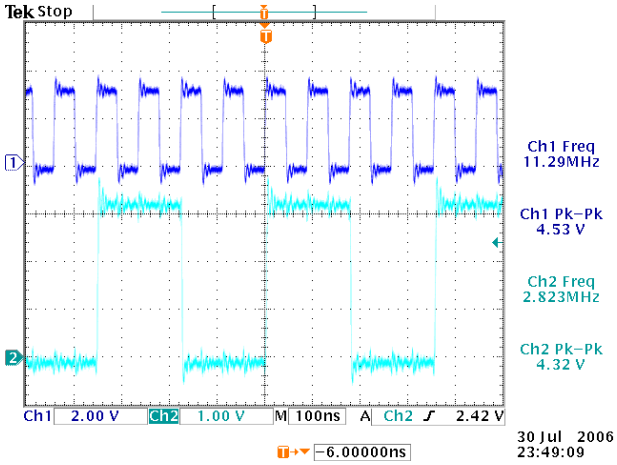


HDMI 1&2

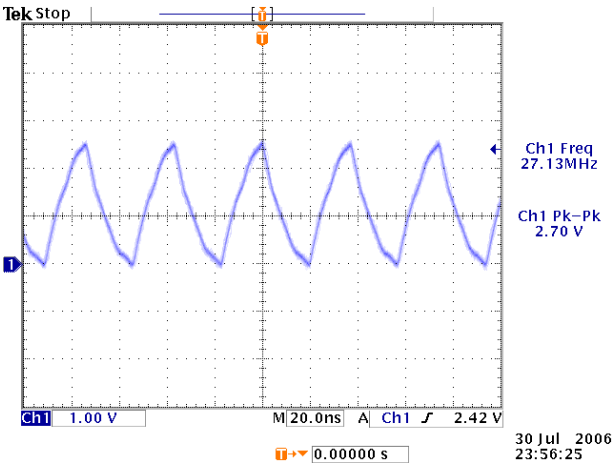
CH1 RX1_2 (P11 PIN 1); CH2 DATA2+ (U31 PIN3)



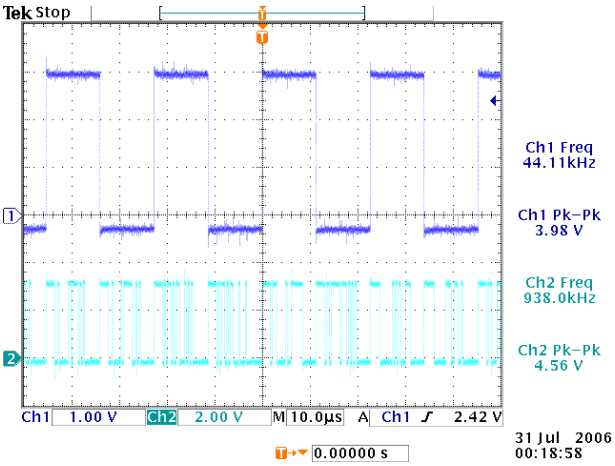
CH1 HDMIMCLK (U19 PIN 79) ;CH2 HDMIBCLK (U19 PIN 76)



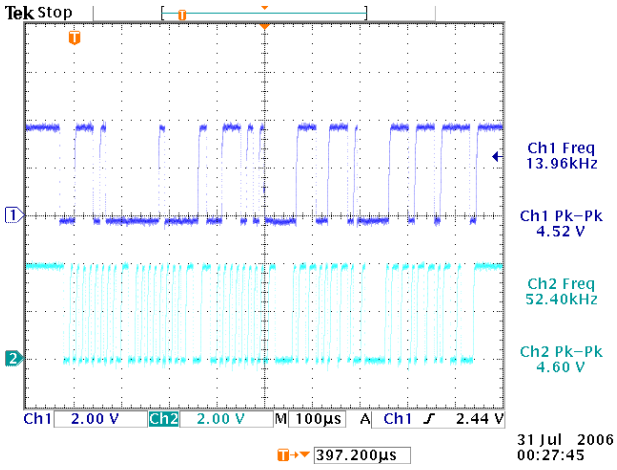
CH1 SOG_IN (U19 PIN4)



CH1 HDMILRCK (U19 PIN75) CH2 HDMISDO (U19 PIN74)

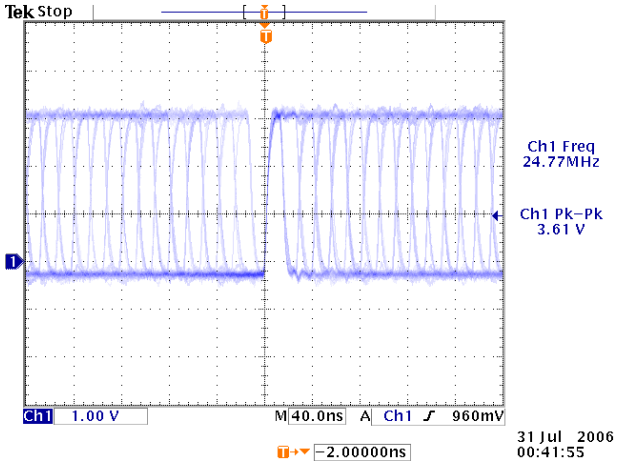


CH1 DDC_SDA (Q14 PIN3);CH2 DDC_SCL (Q13 PIN3)

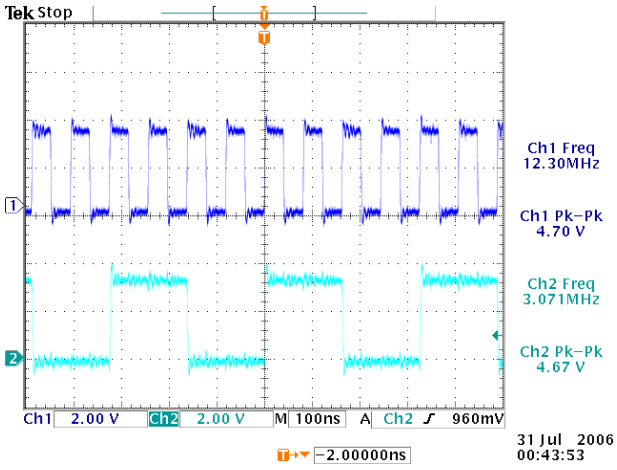


DTV HD

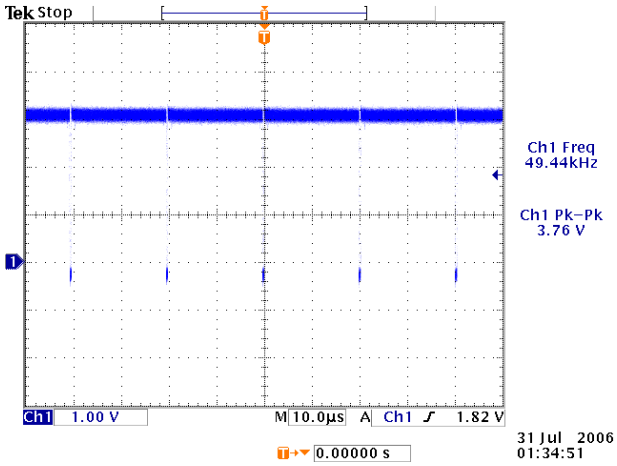
CH1 VOB0 (RP35)



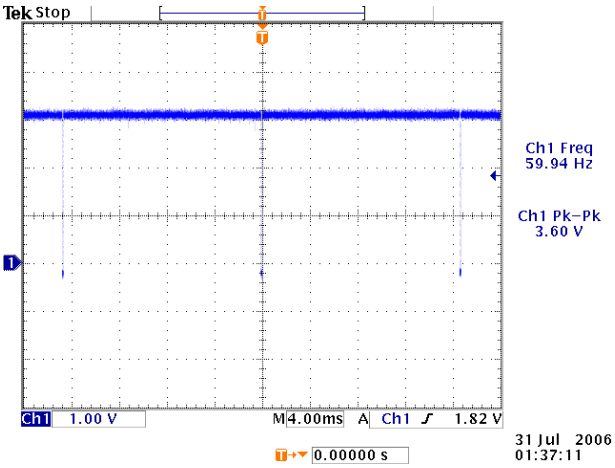
CH1 AO1MCLK (DU9 PIN J1) CH2 AO1BCK (DU9 PIN J2)



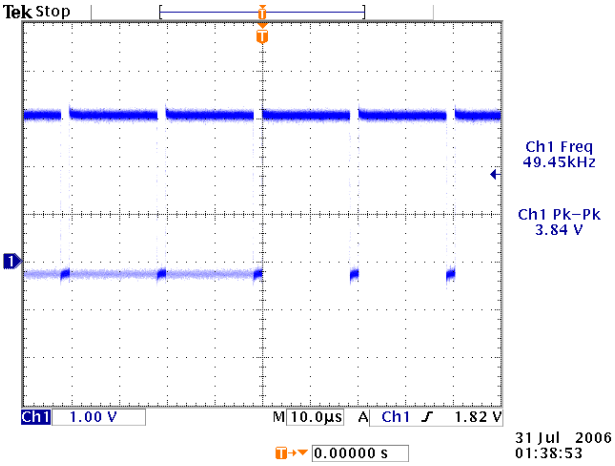
CH1 VOHSYNC (DU9 PIN V4)



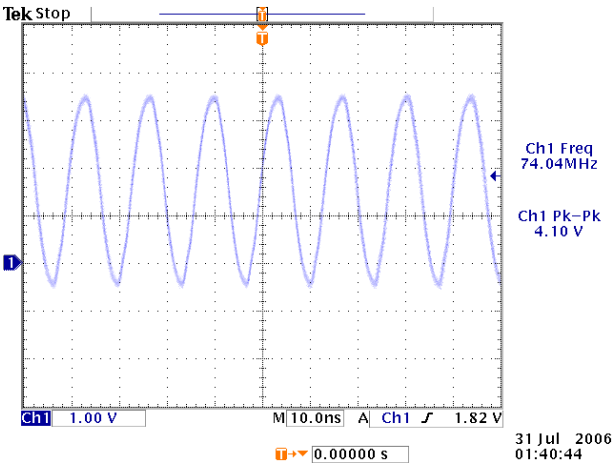
CH1 VOVSYNC (DU9 PIN W1)



CH1 VODE (DU9 PIN W2)

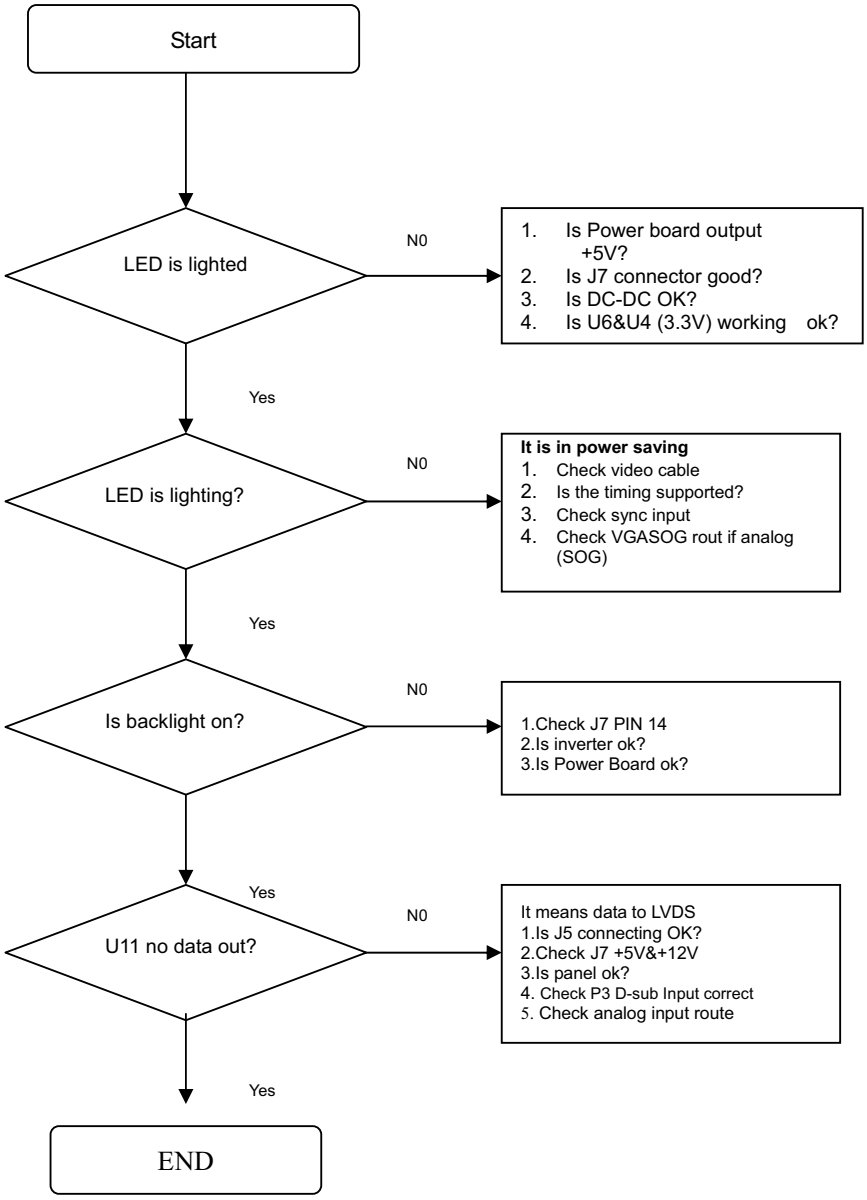


CH1 VOPCLK (DU9 PIN V3)

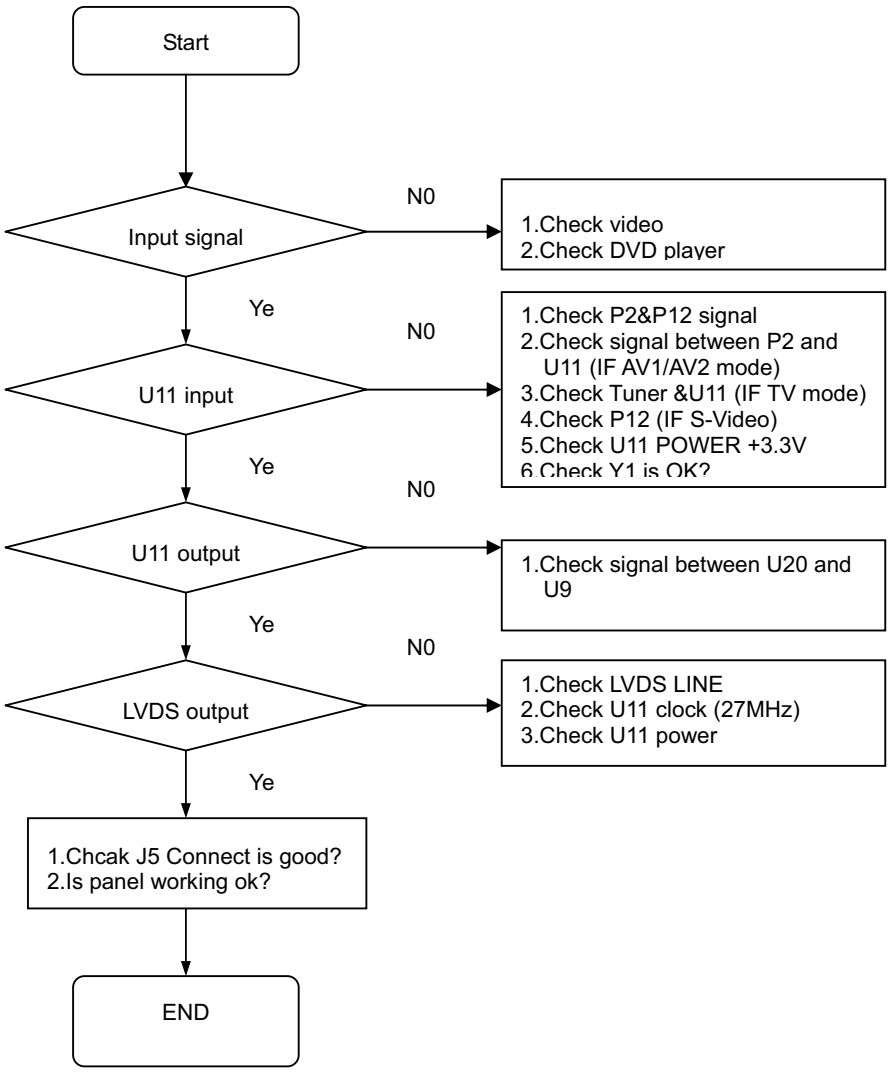


Chapter 9 Trouble shooting

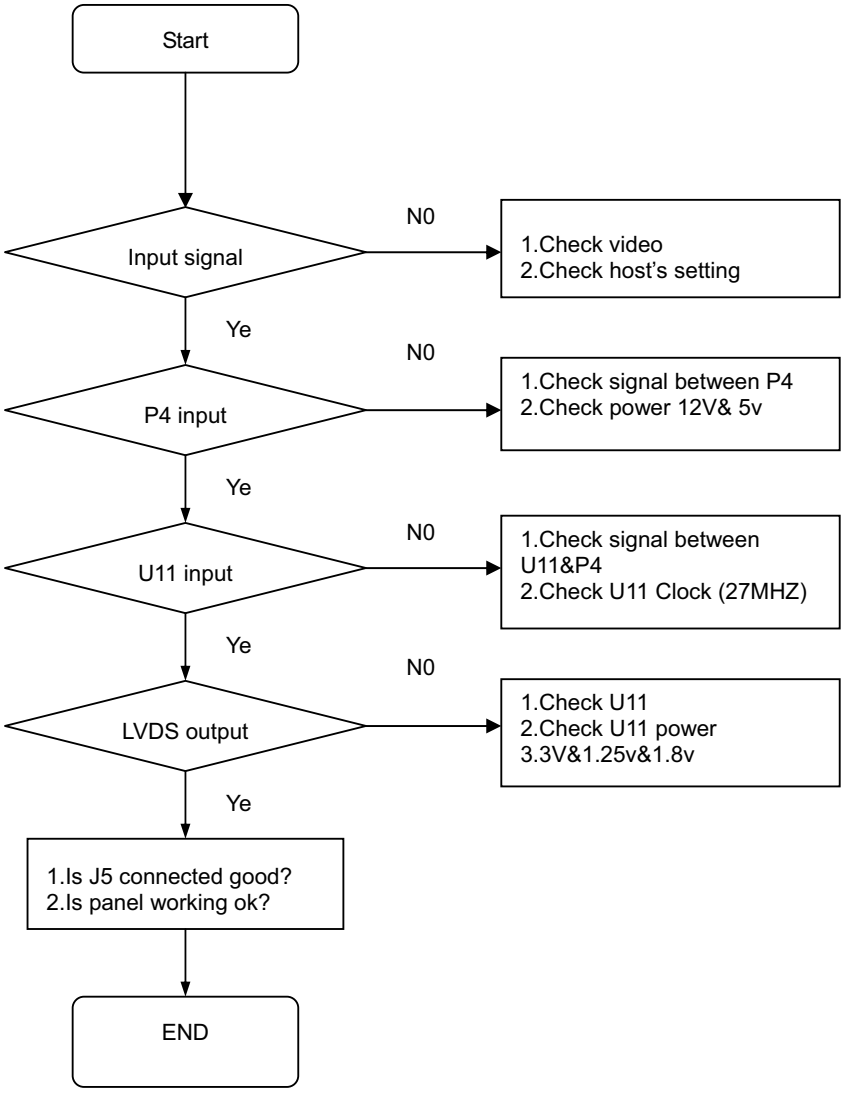
MONITOR DISPLAY NOTHING (PC MODE)



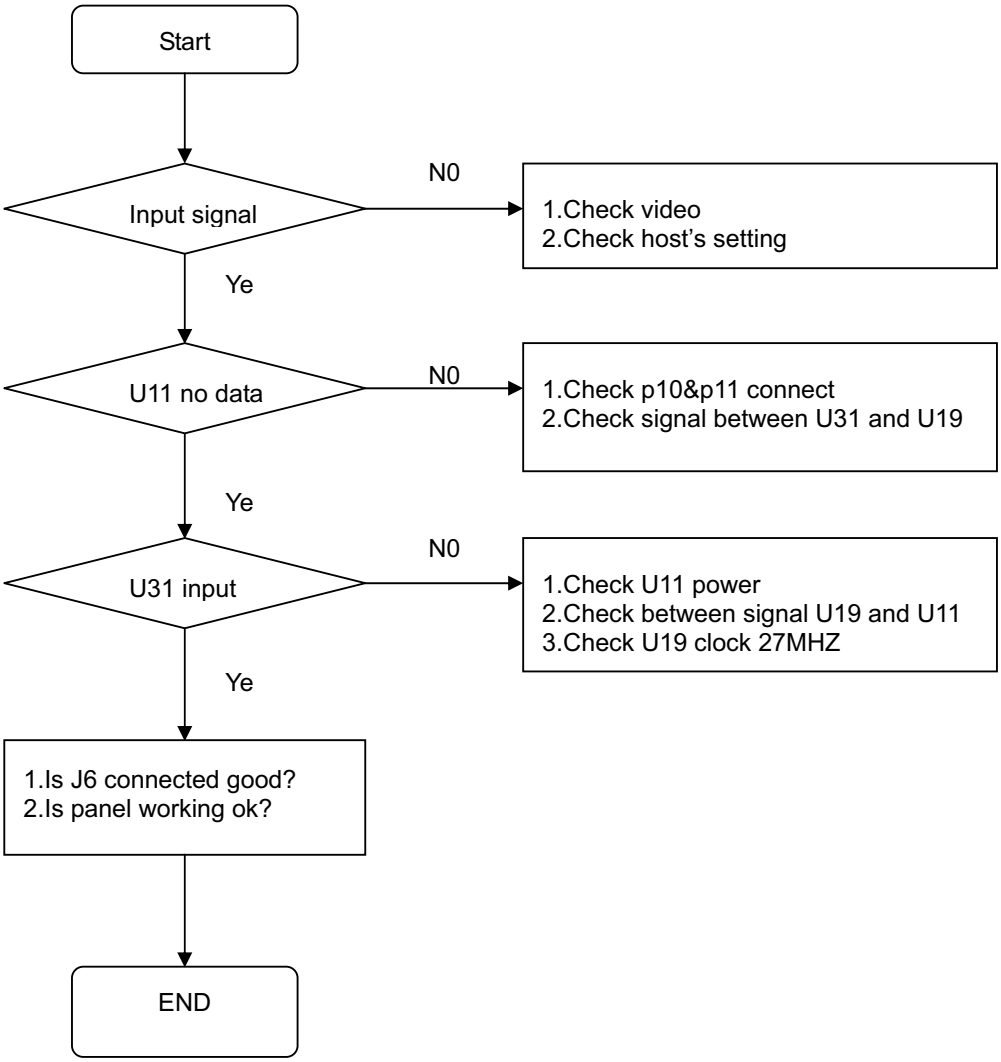
(TV, COMPOSITE VIDEO1, 2, S-VIDEO) IS NOT DISPLAY CORRECTLY



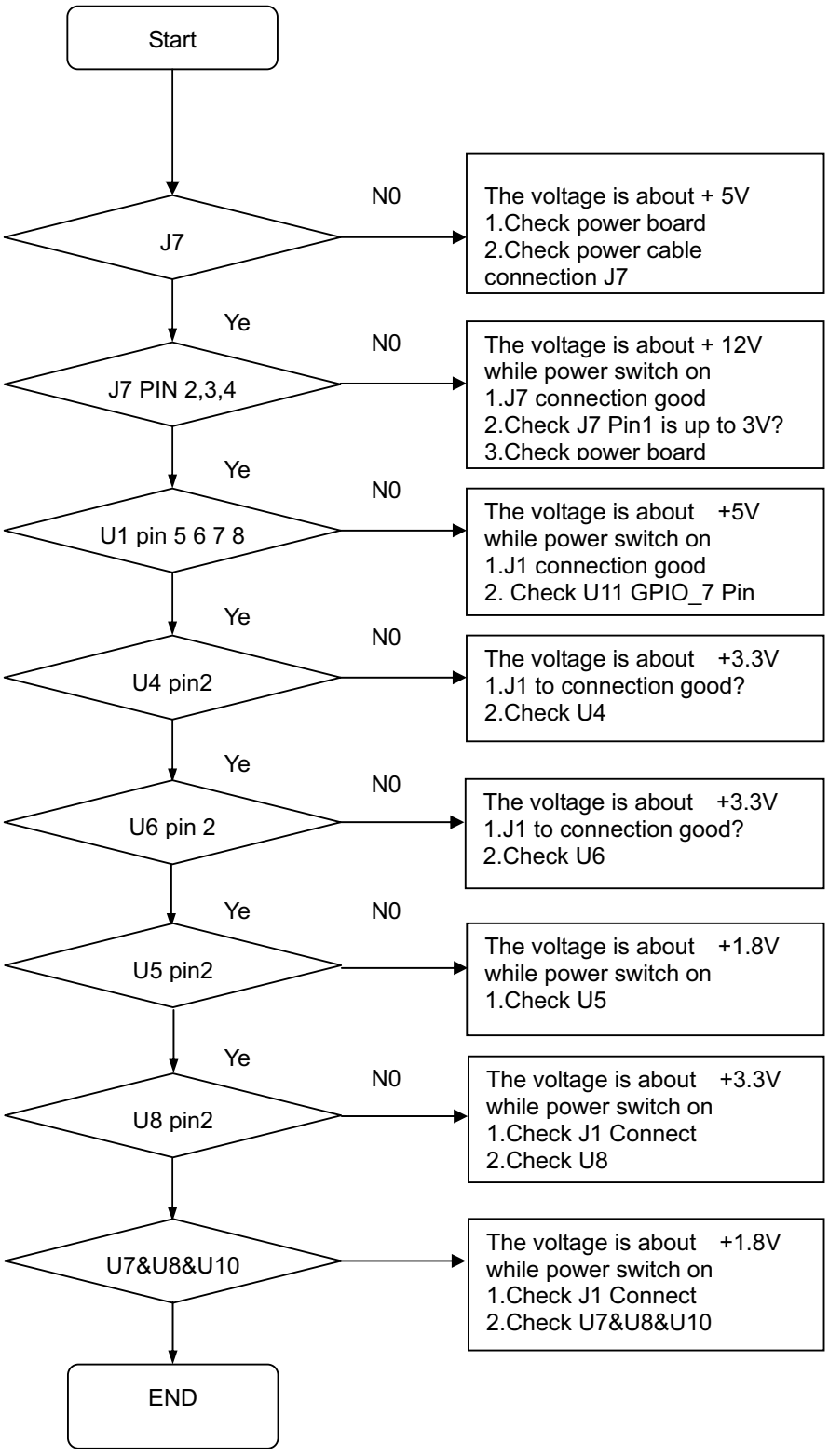
(COMPONENT1, 2) IS NOT DISPLAY CORRECTLY



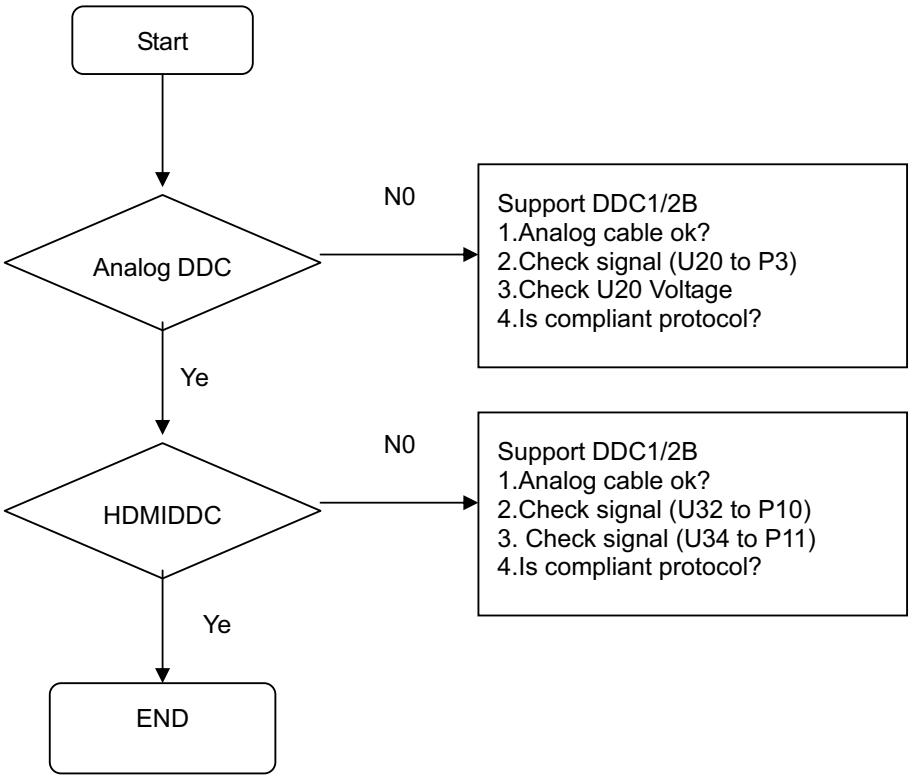
(HDMI) IS NOT DISPLAY CORRECTLY



TROUBLE OF DC-DC CONVERTER

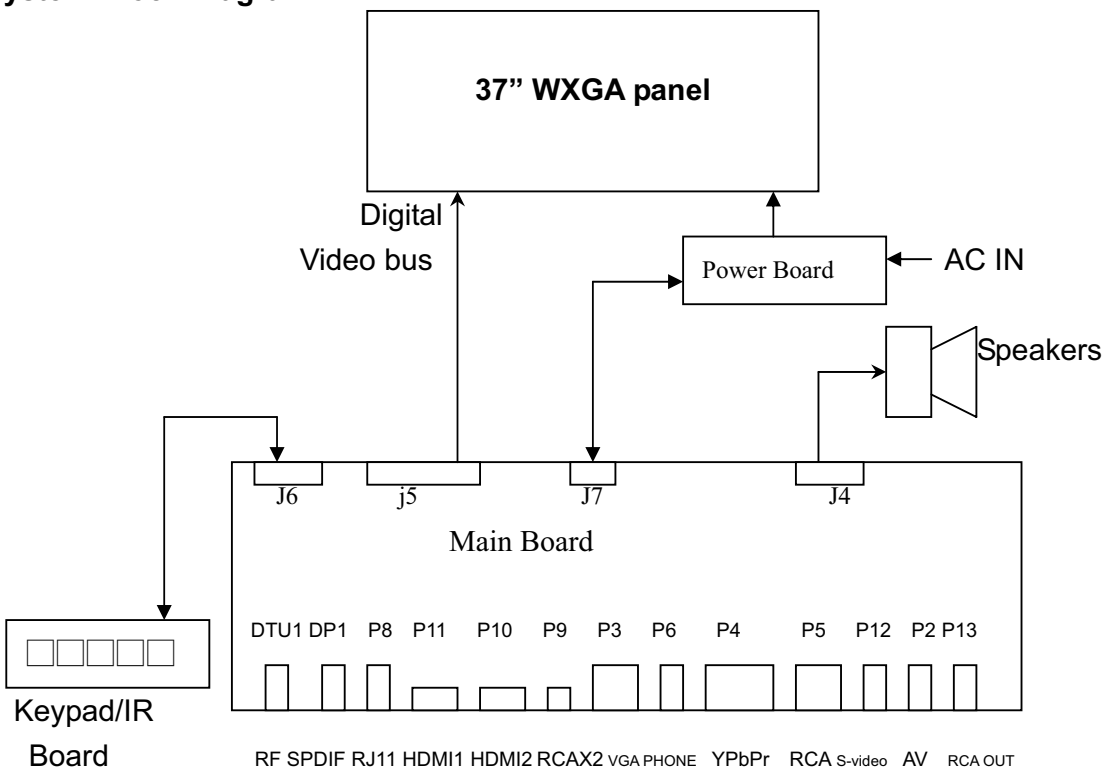


TROUBLE OF DDC READING



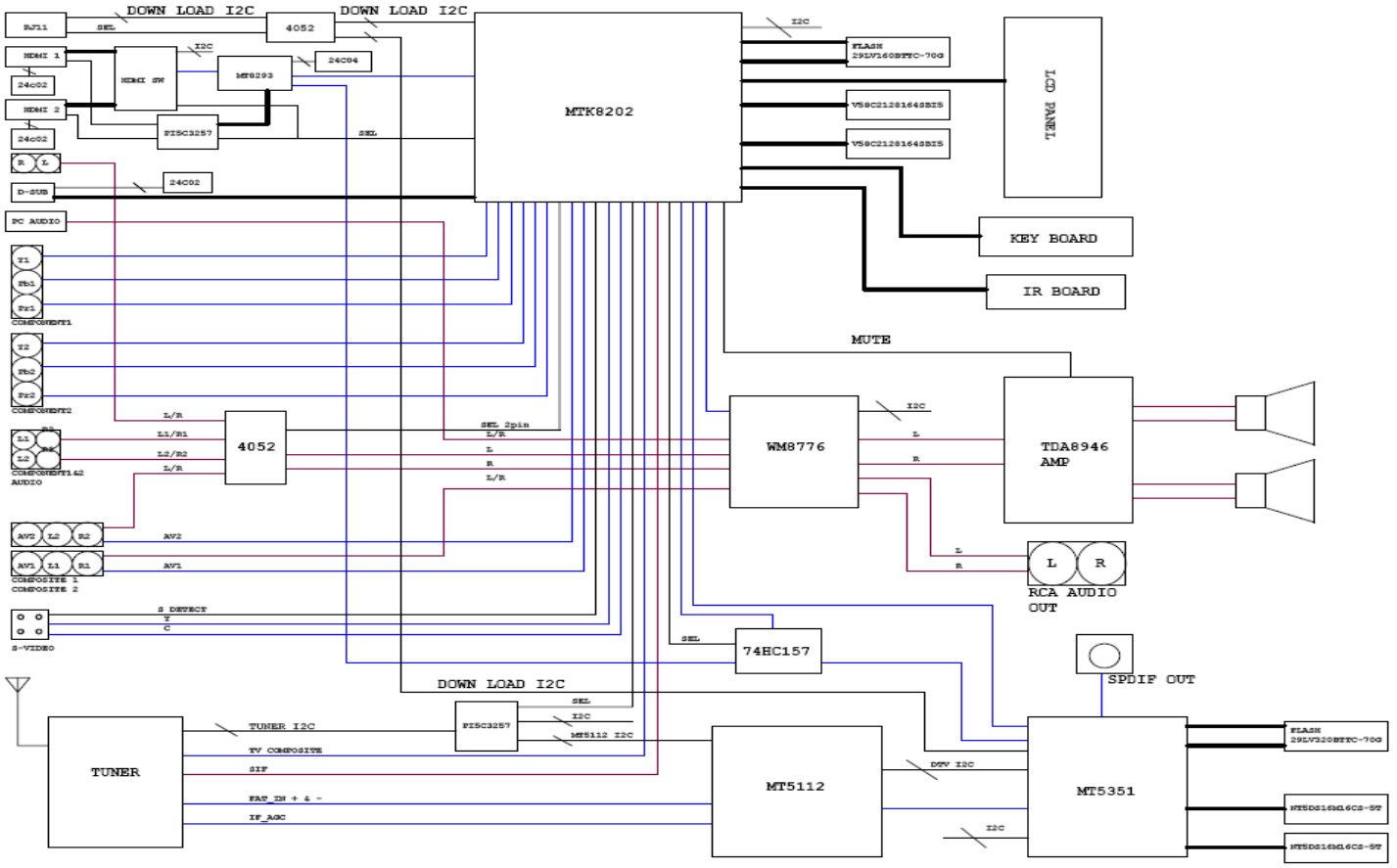
Chapter 10 Block Diagram

System Block Diagram



The TV system block diagram is powered by power board that transforms AC source of 100V~240V AC +/- 10% @ 50/60 HZ into DC 5V & 12V& 24Vsource. The main board receives different types of video signal into the MTK8202 Ic. Afterward, the MTK8202 Ic process the signals control the various functions of the monitor and outputs control signal, video signal and power to the 42” WXGA panel to be displayed. The power send to the panel is first processed by the inverter. The function of the inverter is to step up the voltage supplied by the main board to the power that is needed to light up the lamps in the panel. Simultaneously, the digital video signals are processed in the panel and the outcome determines the brightness, pixel on/off and the color displayed on the panel. The analog video signals of S-video, YPbPr, TV, PC and A/V all video signals are translated from analog signals into MTK8202 generates the vertical and horizontal timing signals for display device. The analog audio of s-video, YpbPr, TV, PC and A/V is transmitting to the WM877 processed. The purpose is process the input audio signal to control volume, bass, treble, surround, and balance. The HDMI video and audio is must transmitting to MT8293 processed then TMDS signal to the MTK8202 generates the vertical and horizontal timing signals for display device. All functions are controllable by the main board. Plus, all functions in the IC boards are programmable using I2C Bus.

Main Board Block Diagram



Chapter 11 Spare Parts List

PART NO	DESCRIPTION	LOC	QTY	REMARK
0185-1302-0073	FUSE 125V/3A SMD (R451003) LF	F2	1	
0185-1502-0073	FUSE 125V/5A SMD (R45105) L-F	F1	1	
0320-4000-0142	POWER CORD 110V UL/CSA 1800mm BLK N.M. (VINC)		1	
0321-0000-0411	AV CABLE RCA(Y/W/R) 1800mm BLK (VINC)		1	
0360-1000-0420	POWER INDUCTOR L:10uH 1.44A 5.8x5.2mm SMD LF	DL16	1	
0361-2022-0030	COIL CHOKE 22UH 2.9A 11*12 DIP TSL1112RA-220K2R9-PF	DL7,DL8	2	
0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	U1,U2,U3	3	
0430-4013-3109	IC TDA8946AJ 17PIN DIP LF	U24	1	
0430-6002-8079	IC AP1117E25LA SOT-223 L-F	DU3,U16	2	
0430-6005-5079	IC AP1117E18LA LF SOT-223	U10,U7,U9	3	
0430-6007-5079	IC AP1117E33LA LF SOT-223	DU2,U4,U6,U8	4	
0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	DU4,U18,U5	3	
0430-6010-9028	IC G2996F1Uf 8PIN SOP-8(FD) LF	DU17,U15	2	
0430-6011-3210	IC MC7805CTG 3PIN TO-220 LF	DU1	1	
0430-6015-5079	IC STEP DOWN CONVERTER AP1513SA SOP 8PIN LF	DU5 ,DU6	2	
0430-6015-6099	IC RESET STL8110GCL438 4.38V SOT-23 3PIN LF	U27	1	
0430-6015-8079	IC DC/DC CONVERTER AP1522WA SOT23-5 5PIN LF	DU18	1	
0430-7035-1999	IC MT5351AG 471PIN BGA LF	DU9	1	
0430-7042-8999	IC SCALER MT8202AG/BD-L BGA 388PIN LF	U11	1	
0980-0200-2130	MODULE. IR RECEIVER (FM-6038LM-5AN)	UR1	1	
1801-0124-0010	FRONT BEZEL (VX37L HDTV)(ABS) ASS'Y		1	
1801-0214-8010	REAR COVER (VX37L HDTV)(ABS) ASS'Y		1	
1801-0524-3010	BASE COVER (VX37L HDTV)(ABS) ASS'Y		1	
1925-1000-3460	EPS FOAM_TL (VX37L HDTV)		1	
1925-1000-3470	EPS FOAM_TR (VX37L HDTV)		1	
1925-1000-3480	EPS FOAM_BL (VX37L HDTV)		1	
1925-1000-3490	EPS FOAM_BR (VX37L HDTV)		1	
1925-1100-0230	PE BAG 320*230*0.04T		1	
1925-1100-0280	PE BAG (180W*290L*0.04t)(PE-LD)(ACC.-1)		1	
1925-1100-2340	PE BAG (VX37L HDTV)		1	
1925-1200-8300	ACCESSORY BOX (VIZIO L37 HDTV)		1	
1925-1200-9040	CARTON TRAY (VX37L HDTV)		1	
1925-1200-9200	CARTON VIZIO VX37L HDTV		1	
1925-1300-7080	Brochure VIZIO Series		1	
1925-1300-8000	Quick Setup Guide VIZIO VX37L HDTV		1	
1925-1300-8010	MANUAL VIZIO VX37L HDTV		1	
1925-1400-2710	Register CARD/VIZIO L15		1	
1925-1900-0610	CARTON JOINT (TM-32V)		4	
1925-2000-0030	Polishing Cloth VIZIO P42 HDTV10A		1	
1936-1100-8790	B/C LBL VIZIO VX37L HDTV		1	
1936-1300-1550	SERIAL NO.LBL byd:sign		1	
1936-1600-1180	TECHNOLOGY LOGO LBL VIZIO VX20L/32/37 HDTV		1	
1947-1200-0310	ACETATE CLOTH TAPE (醋酸布膠帶) 27*75mm		3	
1947-1200-0400	ACETATE CLOTH TAPE (醋酸布膠帶) 20*45mm		11	

PART NO	DESCRIPTION	LOC	QTY	REMARK
1947-1200-1560	FILAMENT TAPE (TIBON 25wide)		0.7	
1947-1200-3680	ACETATE CLOTH TAPE (醋酸布膠帶) 40*80mm		1	
1947-1200-3710	MYLAR 3.5*10*120(VX37L-LPL)		1	
1947-1200-3720	MYLAR 3.5*10*60(VX37L-LPL)		1	
1947-1700-0020	SHIELDING AL. TAPE (45.0*25.0)		1	
1947-1700-0130	SHIELDING AL.TAPE (70.0*50.0)		3	
1947-1700-0290	SHIELDING AL. TAPE (50.0W*100.0L)		1	
1947-1800-0370	GASKET BLOCK (5.5H*10.0W*30.0Lmm)		1	
1947-1800-0490	GASKET BLOCK (12L*10W*2.5Hmm) HOLE 6 φ		1	
1947-1800-1080	GASKET BLOCK (17.0W*120.0L*13.0H)(VX37L)		1	
1947-1800-1090	GASKET BLOCK (17.0W*100.0L*25.0H)(VX37L)		8	
1947-1900-0160	HEAT PATH (25*14mm , t=1 mm)		1	
3637-0012-0146	CONNECTOR BD ASS'Y VX37L HDTV			
3637-0012-0150	MAIN BD ASS'Y VX37L HDTV (HDCP)			
3637-0012-0156	DISPLAY BD ASS'Y VX37L HDTV			
3642-0022-0189	IR BD ASS'Y GV42L HDTV			

Chapter 12 Complete Parts List

9637-8500-2053 LCD TV 37" VX37L HDTV VINC(LG LC370WX1-SLA1)(BLACK)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			3637-0012-0312	PACKING ASS'Y VX37L HDTV	1
2			3637-0022-0331	PANEL ASS'Y VX37L HDTV(LG,LC370WX1-SLA1) Black	1

3637-0012-0312 PACKING ASS'Y VX37L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			1701-0800-2160	REAR PLATE VIZIO VX37L HDTV	1
2			1925-1000-3460	EPS FOAM_TL (VX37L HDTV)	1
3			1925-1000-3470	EPS FOAM_TR (VX37L HDTV)	1
4			1925-1000-3480	EPS FOAM_BL (VX37L HDTV)	1
5			1925-1000-3490	EPS FOAM_BR (VX37L HDTV)	1
6			1925-1100-2340	PE BAG (VX37L HDTV)	1
7			1925-1200-9040	CARTON TRAY (VX37L HDTV)	1
8			1925-1200-9200	CARTON VIZIO VX37L HDTV	1
9			1925-1900-0610	CARTON JOINT (TM-32V)	4
10			1936-1100-8790	B/C LBL VIZIO VX37L HDTV	1
11			1936-1300-1550	SERIAL NO.LBL byd:sign	1
12			1936-1600-1180	TECHNOLOGY LOGO LBL VIZIO VX20L/32/37 HDTV	1
13			1947-1200-1560	FILAMENT TAPE (TIBON 25wide)	0.7
14			3637-0012-0393	ACCESSARY ASS'Y VX37L HDTV	1

3637-0022-0331 PANEL ASS'Y VX37L HDTV(LG,LC370WX1-SLA1) Black

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0211-0370-1861	LCD MODULE 37.0" LC370WX1-SLA1 (LG.PHILIPS)(Korea)	1
2			0260-0000-0330	AC INLET +VHR5P 1617#22 290mm 1015#18 50mm	1
3			0335-1006-0570	SPEAKER 10W 6ohm(140*60*72) +Wire 550/950mm (L,R)	1
4			0460-1006-0260	WH A2001H02-6P/A2001H02-6P 1571#28 220mm	1
5			0460-1008-0460	WH A2001H02-8P-A2001H02-4P+5P 2464#28 690/720	1
6			0460-1012-0281	WH A2001H02-12P/A2543H00-12P 1007#24 410mm	1
7			0460-1014-0080	WH A2001H02-14P/A2543H02-13P 1007#24 270mm	1
8			0460-1014-0150	WH A2001H02-14P/A2543H00-12P 1007#24 650mm	1
9			0460-3430-0971	WH P240430/FI-X30HL 20276#30 480mm + GND	1
10			0500-0507-0250	POWER BD ASS'Y DPS-247AP L-F	1
11			0950-0000-0010	License: Dolbly-AC3 Two-Channel Dolby Digital Deco	1
12			0950-0000-0020	License: MPEG-LA Consumer Products	1
13			0950-0000-0030	License: HDMI	1
14			0960-0000-0050	SOFTWARE MTK HDCP KEY CODE (China)	1
15			0980-0700-0060	LED BACKLIGHT 18*50 LYSB-4916W/SY-D 800mm	1
16			1701-1000-0430	BASE FOOT (TM-32V)	6
17			1701-1500-0690	WIRE SADDLE (CH-14)	3
18			1701-1500-1660	SPACER SUPPORT (DCB-6.5)	1
19			1701-1500-2500	CABLE CLIP(VX37L)	1
20			1701-1933-1010	Side Jack Cover(VX37L-LPL)(ABS)	1
21			1712-0100-4590	HEAT SINK FIX MTEAL (TM-30A)	1
22			1712-0101-0500	TERMINAL BKT (VX37L HDTV)	1
23			1712-0101-0510	MAIN SHIELD (VX37L HDTV)	1
24			1712-0101-0540	WALL MOUNT SUPPORT (VX37L HDTV)	4
25			1712-0101-1120	CHASSIS FOR (VX37L-LPL)	1
26			1712-0101-1130	PANEL HOLDER-L (VX37L-LPL)	1
27			1712-0101-1140	PANEL HOLDER-R (VX37L-LPL)	1
28			1712-0400-1920	HEAT SINK (VX37L HDTV)	1
29			1720-0003-0620	MAC. SCREW-MB M3.0*6.0L,Ni	40
30			1720-1204-0820	MAC. SCREW-MPGW M4.0*8.0L,Ni	1
31			1720-1504-0820	MAC. SCREW-MPSWF M4.0*8.0L,NI	16
32			1720-3003-0820	MAC.SCREW-MF M3.0*8.0L,NI	5
33			1720-7344-0820	MAC. SCREW-MHSW #4-40*8.0L,Ni	2
34			1721-0003-0820	TAP. SCREW-TB #3.0*8.0L,NI	9
35			1721-0004-1020	TAP. SCREW-TP #4.0*10.0L,NI	15
36			1721-0004-1650	TAP. SCREW-TP #4.0*16.0L, BLK-Ni	14
37			1721-0045-1020	TAP. SCREW-TP #4.5*10.0L, Ni	2
38			1721-3003-0920	TAP. SCREW-MF M3.0*9.0L, Ni	2
39			1721-4003-1020	TAP. SCREW-TRF #3.0*10.0L,Ni	2
40			1721-4104-1220	TAP. SCREW-TRF #4.0*12.0L,Ni	6
41			1725-0004-1020	MAC. SCREW-MB M4.0*10.0L,Ni,NYLOK	12
42			1801-0124-0010	FRONT BEZEL (VX37L HDTV)(ABS) ASS'Y	1
43			1801-0214-8020	REAR COVER (VX37L-LPL)(ABS) ASS'Y	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44			1801-0524-3010	BASE (VX37L HDTV)(ABS) ASS'Y	1
45			1947-1200-0400	ACETATE CLOTH TAPE (醋酸布膠帶) 20*45mm	17
46			1947-1200-3680	ACETATE CLOTH TAPE (醋酸布膠帶) 40*80mm	1
47			1947-1200-3760	CLOTH L60*W8*T0.3mm(VX37L)	2
48			1947-1200-3770	CLOTH L100*W8*T0.3mm(VX37L)	2
49			1947-1200-3780	MYLAR L60*W6*T1.5mm(VX37L)	1
50			1947-1700-0020	SHIELDING AL. TAPE (45.0*25.0)	1
51			1947-1700-0130	SHIELDING AL.TAPE (70.0*50.0)	4
52			1947-1800-0370	GASKET BLOCK (5.5H*10.0W*30.0Lmm)	1
53			1947-1800-0490	GASKET BLOCK (12L*10W*2.5Hmm) HOLE 6 φ	1
54			1947-1800-1080	GASKET BLOCK (17.0W*120.0L*13.0H)(VX37L)	1
55			1947-1800-1090	GASKET BLOCK (17.0W*100.0L*25.0H)(VX37L)	9
56			1947-1900-0160	HEAT PATH (25*14mm , t=1 mm)	1
57			3637-0012-0146	CONNECTOR BD ASS'Y VX37L HDTV	1
58			3637-0012-0150	MAIN BD ASS'Y VX37L HDTV (HDCP)	1
59			3637-0012-0156	DISPLAY BD ASS'Y VX37L HDTV	1
60			3642-0022-0189	IR BD ASS'Y GV42L HDTV	1

3637-0012-0146 CONNECTOR BD ASS'Y VX37L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0170-3870-0161	PCB CONN. BD FR1 72.5*27*1.6t S (VX37L HDTV)(1:10)	1
2		J1	0302-9030-0114	RCA JACK 1ROW 3I/O (Y-W-R) L-F	1
3		J2	0451-2000-0666	WAFER 2.0mm 6P 90' DIP KINK (M24266R) L-F	1

3637-0012-0150 MAIN BD ASS'Y VX37L HDTV (HDCP)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			363700120150A	MAIN BD ASS'Y VX37L HDTV AI	1
2			363700120150M	MAIN BD ASS'Y VX37L HDTV MI	1
3			363700120150S	MAIN BD ASS'Y VX37L HDTV SMD	1

3637-0012-0156 DISPLAY BD ASS'Y VX37L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0171-1770-1760	PCB DISPLAY BD FR4 20*150*1.6t VX37L HDTV(1:10)	1
2		JD1	0451-2000-0566	WAFER 2.0mm 5P 90' DIP KINK (M24265R) L-F	1
3	SS		0451-2003-0563	WAFER 2.00mm 5P 90' KINK (A2001WR2-5P) L-F	
4		RD1	0131-1809-0015	RES. MF 18ohm 1/10W F 0603 L-F	1
5		RD10	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
6		RD11	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
7		RD12	0131-4302-0015	RES.MF 43Kohm 1/10W F 0603	1
8		RD2	0131-9090-0015	RES. MF 909ohm 1/10W F 0603	1
9		RD3	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
10		RD4	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
11		RD5	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
12		RD6	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
13		RD7	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
14		RD8	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
15		RD9	0131-3300-0015	RES. MF 330ohm 1/10W F 0603 L-F	1
16		SWD1	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
17		SWD2	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
18		SWD3	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
19		SWD4	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
20		SWD5	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
21		SWD6	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
22		SWD7	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1

3637-0012-0393 ACCESSARY ASS'Y VX37L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0320-4000-0142	POWER CORD 110V UL/CSA 1800mm BLK N.M. (VINC)	1
2			0321-0000-0411	AV CABLE RCA(Y/W/R) 1800mm BLK (VINC)	1
3			0602-3000-0020	Battery Zn-Carbon 1.5V AA	2
4			0980-0304-9011	REMOTE CONTROL 66700BA0-B10-R(Orange backlight) LF	1
5			1925-1100-0230	PE BAG 320*230*0.04T	2
6			1925-1100-0280	PE BAG (180W*290L*0.04t)(PE-LD)(ACC.-1)	1
7			1925-1200-8300	ACCESSORY BOX (VIZIO L37 HDTV)	1
8			1925-1300-7080	Brochure VIZIO Series	1
9			1925-1300-8000	Quick Setup Guide VIZIO VX37L HDTV	1
10			1925-1300-8010	MANUAL VIZIO VX37L HDTV	1
11			1925-1400-2710	Register CARD/VIZIO L15	1
12			1925-2000-0030	Polishing Cloth VIZIO P42 HDTV10A	1

3642-0022-0189 IR BD ASS'Y GV42L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			364200220189M	IR BD ASS'Y GV42L HDTV MI	1
2			364200220189S	IR BD ASS'Y GV42L HDTV SMD	1

363700120150A MAIN BD ASS'Y VX37L HDTV AI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		CE1	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
2		CE11	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
3		CE12	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
4		CE13	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
5		CE14	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
6		CE15	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
7		CE16	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
8		CE17	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
9		CE18	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
10		CE19	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
11		CE2	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
12		CE20	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
13		CE21	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
14		CE22	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
15		CE23	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
16		CE24	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
17		CE25	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
18		CE26	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
19		CE27	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
20		CE28	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
21		CE29	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
22		CE3	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
23		CE30	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
24		CE31	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
25		CE32	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
26		CE33	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
27		CE34	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
28		CE35	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
29		CE36	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
30		CE37	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
31		CE38	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
32		CE39	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
33		CE4	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
34		CE40	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
35		CE41	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
36		CE42	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
37		CE43	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
38		CE44	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
39		CE45	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
40		CE46	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
41		CE47	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
42		CE48	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
43		CE5	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44		CE56	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
45		CE57	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
46		CE58	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
47		CE59	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
48		CE6	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
49		CE61	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
50		CE62	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
51		CE63	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
52		CE64	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
53		CE65	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
54		CE66	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
55		CE67	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
56		CE68	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
57		CE69	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
58		CE7	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
59		CE70	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
60		CE71	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
61		CE72	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
62		CE73	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
63		CE74	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
64		CE75	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
65		CE76	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
66		CE77	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
67		CE78	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
68		CE79	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
69		CE8	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
70		CE80	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
71		CE81	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
72		CE82	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
73		CE84	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
74		CE87	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
75		CE88	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
76		CE89	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
77		CE9	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
78		CE90	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
79		CE91	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
80		CE92	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
81		CE93	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
82		CE94	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
83		CE95	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
84		CE96	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
85		DCE1	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
86		DCE10	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
87		DCE11	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
88		DCE12	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
89		DCE13	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
90		DCE14	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
91		DCE15	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
92		DCE17	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
93		DCE18	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
94		DCE19	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
95		DCE2	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
96		DCE20	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
97		DCE21	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
98		DCE22	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
99		DCE23	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
100		DCE24	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
101		DCE25	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
102		DCE26	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
103		DCE27	0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	1
104		DCE3	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
105		DCE4	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
106		DCE5	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
107		DCE6	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
108		DCE7	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
109		DCE8	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
110		DCE9	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
111		FB36	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
112		L1	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
113		L26	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1

363700120150M MAIN BD ASS'Y VX37L HDTV MI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		CE83	0103-1102-1216	E/C VZ 1000uF 16V 105'C F (10*12.5)	1
2		DL7	0361-2022-0030	COIL CHOKE 22UH 2.9A 11*12 DIP	1
3		DL8	0361-2022-0030	COIL CHOKE 22UH 2.9A 11*12 DIP	1
4		DP1	0300-6400-0031	OPTO CONN. Transmitter (134-0029-399A) L-F	1
5		DTU1	0980-0103-3060	MODULE TUNER DTVS205CH201A L-F	1
6		DU1	0430-6011-3210	IC MC7805CTG 3PIN TO-220 LF	1
7	SS		0430-6011-3204	IC LM7805CT TO-220 3PIN LF	
8		DY1	0280-2500-0012	X'TAL 25MHZ 49/US 30PPM 20PF LF	1
9		J1	0451-1250-0366	WAFER 1.25mm 3P 90' DIP KINK (M24013R) L-F	1
10		J4	0451-2500-0446	WAFER 2.5mm 4P 90' DIP KINK (M241854R) L-F	1
11	SS		0451-2500-0443	WAFER 2.50mm 4P 90' KINK (A2501WR2-4P) L-F	
12		J6	0451-2000-0866	WAFER 2.0mm 8P 90' DIP KINK (M24268R) L-F	1
13	SS		0451-2003-0863	WAFER 2.00mm 8P 90' KINK (A2001WR2-8P) L-F	
14		J7	0451-2000-1466	WAFER 2.0mm 14P 90' DIP KINK (M242614R) L-F	1
15	SS		0451-2003-1463	WAFER 2.00mm 14P 90' KINK (A2001WR2-14P) L-F	
16		J9	0451-2000-0666	WAFER 2.0mm 6P 90' DIP KINK (M24266R) L-F	1
17	SS		0451-2003-0663	WAFER 2.00mm 6P 90' KINK (A2001WR2-6P) L-F	
18		P12	0300-3041-0090	S-VIDEO 4PIN 90' (2MJ-0602-005) L-F	1
19		P13	0302-9020-0114	RCA JACK 2ROW 2I/O (W-R) L-F	1
20		P2	0302-9030-0114	RCA JACK 1ROW 3I/O (Y-W-R) L-F	1
21		P3	0300-1205-3151	D-SUB FEMALE 90' 15P 3ROW (DV11201-H5R6-4F) L-F	1
22		P4	0302-9060-0020	RCA JACK 2ROW 6I/O (G-B-R)	1
23		P5	0302-9040-0010	RCA JACK 2ROW 4I/O 90' (W-R) L-F	1
24		P6	0302-0350-0012	PHONE JACK 3.5 φ 5P 90' +SHIELD L-F	1
25		P8	0202-6000-0003	RJ11 6P6C Gray UNDER CONTACT L-F	1
26		P9	0302-9020-0114	RCA JACK 2ROW 2I/O (W-R) L-F	1
27		U24	0430-4013-3109	IC TDA8946AJ 17PIN DIP LF	1
28		Y1	0280-2700-0012	X'TAL 27MHZ 49/US 30PPM 20PF 40ohm	1

363700120150M MAIN BD ASS'Y VX37L HDTV MI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		CE83	0103-1102-1216	E/C VZ 1000uF 16V 105'C F (10*12.5)	1
2		DL7	0361-2022-0030	COIL CHOKE 22UH 2.9A 11*12 DIP	1
3		DL8	0361-2022-0030	COIL CHOKE 22UH 2.9A 11*12 DIP	1
4		DP1	0300-6400-0031	OPTO CONN. Transmitter (134-0029-399A) L-F	1
5		DTU1	0980-0103-3060	MODULE TUNER DTVS205CH201A L-F	1
6		DU1	0430-6011-3210	IC MC7805CTG 3PIN TO-220 LF	1
7	SS		0430-6011-3204	IC LM7805CT TO-220 3PIN LF	
8		DY1	0280-2500-0012	X'TAL 25MHZ 49/US 30PPM 20PF LF	1
9		J1	0451-1250-0366	WAFER 1.25mm 3P 90' DIP KINK (M24013R) L-F	1
10		J4	0451-2500-0446	WAFER 2.5mm 4P 90' DIP KINK (M241854R) L-F	1
11	SS		0451-2500-0443	WAFER 2.50mm 4P 90' KINK (A2501WR2-4P) L-F	
12		J6	0451-2000-0866	WAFER 2.0mm 8P 90' DIP KINK (M24268R) L-F	1
13	SS		0451-2003-0863	WAFER 2.00mm 8P 90' KINK (A2001WR2-8P) L-F	
14		J7	0451-2000-1466	WAFER 2.0mm 14P 90' DIP KINK (M242614R) L-F	1
15	SS		0451-2003-1463	WAFER 2.00mm 14P 90' KINK (A2001WR2-14P) L-F	
16		J9	0451-2000-0666	WAFER 2.0mm 6P 90' DIP KINK (M24266R) L-F	1
17	SS		0451-2003-0663	WAFER 2.00mm 6P 90' KINK (A2001WR2-6P) L-F	
18		P12	0300-3041-0090	S-VIDEO 4PIN 90' (2MJ-0602-005) L-F	1
19		P13	0302-9020-0114	RCA JACK 2ROW 2I/O (W-R) L-F	1
20		P2	0302-9030-0114	RCA JACK 1ROW 3I/O (Y-W-R) L-F	1
21		P3	0300-1205-3151	D-SUB FEMALE 90' 15P 3ROW (DV11201-H5R6-4F) L-F	1
22		P4	0302-9060-0020	RCA JACK 2ROW 6I/O (G-B-R)	1
23		P5	0302-9040-0010	RCA JACK 2ROW 4I/O 90' (W-R) L-F	1
24		P6	0302-0350-0012	PHONE JACK 3.5 φ 5P 90' +SHIELD L-F	1
25		P8	0202-6000-0003	RJ11 6P6C Gray UNDER CONTACT L-F	1
26		P9	0302-9020-0114	RCA JACK 2ROW 2I/O (W-R) L-F	1
27		U24	0430-4013-3109	IC TDA8946AJ 17PIN DIP LF	1
28		Y1	0280-2700-0012	X'TAL 27MHZ 49/US 30PPM 20PF 40ohm	1

363700120150S MAIN BD ASS'Y VX37L HDTV SMD

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			363700120150B	MAIN BD ASS'Y VX37L HDTV SMD BOT	1
2			363700120150T	MAIN BD ASS'Y VX37L HDTV SMD TOP	1

364200220189M IR BD ASS'Y GV42L HDTV MI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		JR1	0451-2000-0466	WAFER 2.0mm 4P 90' DIP KINK (M24264R) L-F	1
2	SS		0451-2003-0463	WAFER 2.00mm 4P 90' KINK (A2001WR2-4P) L-F	
3		UR1	0980-0200-2130	MODULE. IR RECEIVER (FM-6038LM-5AN)	1
4		UR1S	1701-1500-0360	IR HOLDER (TM-15A)	1

364200220189S IR BD ASS'Y GV42L HDTV SMD

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0171-1671-0501	PCB IR BD FR4 66.5*12*1.6t D (GV42L HDTV)(1:20)	1
2		CR2	0111-3106-1614	C/M Multi. 10uF 16V X7R K 1206	1
3	SS		0111-3106-1114	C/M MULTI 10uF 10V X7R K 1206	
4	SS		0112-3106-1614	C/M MULTI 10uF 16V X7R 1206	
5	SS		0115-7106-1614	C/M MULTI 10uF 16V X7R 1206	
6		CR3	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
7	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
8		LR1	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
9		RR1	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
10		RR2	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
11		ZDR1	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1

363700120150B MAIN BD ASS'Y VX37L HDTV SMD BOT

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		C100	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
2	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
3		C101	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
4	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
5		C102	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
6	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
7		C103	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
8	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
9		C104	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
10	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
11		C105	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
12	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
13		C113	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
14	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
15		C121	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
16	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
17		C122	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
18	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
19		C123	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
20	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
21		C124	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
22	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
23		C125	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
24	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
25		C126	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
26	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
27		C127	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
28	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
29		C128	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
30	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
31		C130	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
32	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
33		C131	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
34	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
35		C133	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
36	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
37		C134	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
38	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
39		C135	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
40	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
41		C136	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
42	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
43		C137	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
45		C138	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
46	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
47		C140	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
48	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
49		C141	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
50	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
51		C142	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
52	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
53		C143	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
54	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
55		C144	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
56	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
57		C145	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
58	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
59		C146	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
60	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
61		C147	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
62	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
63		C148	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
64	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
65		C149	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
66	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
67		C150	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
68	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
69		C151	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
70	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
71		C152	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
72	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
73		C153	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
74	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
75		C154	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
76	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
77		C155	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
78	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
79		C156	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
80	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
81		C157	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
82	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
83		C158	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
84	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
85		C171	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
86	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
87		C172	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
88	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
89		C174	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
90	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
91		C175	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
92	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
93		C177	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
94	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
95		C179	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
96	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
97		C180	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
98	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
99		C181	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
100	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
101		C184	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
102	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
103		C186	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
104	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
105		C187	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
106	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
107		C188	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
108	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
109		C189	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
110	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
111		C190	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
112	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
113		C191	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
114	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
115		C192	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
116	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
117		C194	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
118	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
119		C196	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
120	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
121		C197	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
122	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
123		C23	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
124	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
125		C24	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
126	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
127		C25	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
128	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
129		C26	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
130	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
131		C27	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
132	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
133		C28	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
134	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
135		C29	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
136	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
137		C30	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
138	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
139		C31	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
140	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
141		C32	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
142	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
143		C33	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
144	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
145		C34	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
146	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
147		C35	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
148	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
149		C358	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
150	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
151		C36	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
152	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
153		C360	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
154	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
155		C361	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
156	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
157		C362	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
158	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
159		C367	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
160	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
161		C368	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
162	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
163		C369	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
164	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
165		C37	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
166	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
167		C370	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
168	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
169		C371	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
170	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
171		C372	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
172	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
173		C373	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
174	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
175		C374	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
176	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
177		C376	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
178	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
179		C377	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
180	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
181		C378	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
182	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
183		C379	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
184	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
185		C38	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
186	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
187		C380	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
188	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
189		C381	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
190	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
191		C39	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
192	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
193		C393	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
194	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
195		C394	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
196	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
197		C395	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
198	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
199		C42	0111-3106-1135	C/M MULTI. 10uF 10V Y5V 0805	1
200	SS		0112-3106-1135	C/M MULTI 10uF 10V Y5V 0805	
201		C43	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
202	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
203		C44	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
204	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
205		C45	0111-3106-1135	C/M MULTI. 10uF 10V Y5V 0805	1
206	SS		0112-3106-1135	C/M MULTI 10uF 10V Y5V 0805	
207		C46	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
208	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
209		C47	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
210	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
211		C48	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
212	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
213		C49	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
214	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
215		C50	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
216	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
217		C51	0111-3106-1135	C/M MULTI. 10uF 10V Y5V 0805	1
218	SS		0112-3106-1135	C/M MULTI 10uF 10V Y5V 0805	
219		C52	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
220	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
221		C53	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
222	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
223		C54	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
224	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
225		C55	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
226	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
227		C56	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
228	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
229		C57	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
230	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
231		C58	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
232	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
233		C59	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
234	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
235		C60	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
236	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
237		C61	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
238	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
239		C62	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
240	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
241		C63	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
242	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
243		C64	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
244	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
245		C65	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
246	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
247		C66	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
248	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
249		C67	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
250	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
251		C68	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
252	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
253		C69	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
254	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
255		C70	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
256	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
257		C71	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
258	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
259		C72	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
260	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
261		C73	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
262	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
263		C74	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
264	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
265		C75	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
266	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
267		C76	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
268	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
269		C77	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
270	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
271		C78	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
272	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
273		C79	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
274	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
275		C80	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
276	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
277		C81	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
278	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
279		C84	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
280	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
281		C85	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
282	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
283		C86	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
284	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
285		C87	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
286	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
287		C88	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
288	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
289		C89	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
290	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
291		C90	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
292	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
293		C91	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
294	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
295		C92	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
296	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
297		C93	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
298	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
299		C94	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
300	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
301		C95	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
302	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
303		C96	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
304	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
305		C97	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
306	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
307		C98	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
308	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
309		C99	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
310	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
311		DC100	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
312	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
313		DC101	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
314	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
315		DC102	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
316	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
317		DC103	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
318	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
319		DC104	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
320	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
321		DC105	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
322	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
323		DC106	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
324	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
325		DC107	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
326	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
327		DC108	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
328	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
329		DC109	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
330	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
331		DC110	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
332	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
333		DC112	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
334	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
335		DC114	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
336	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
337		DC115	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
338	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
339		DC116	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
340	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
341		DC117	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
342	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
343		DC118	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
344	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
345		DC119	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
346	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
347		DC121	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
348	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
349		DC122	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
350	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
351		DC123	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
352	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
353		DC124	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
354	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
355		DC126	0111-3100-5107	C/M Multi. 10PF 50V NPO J 0402	1
356	SS		0112-3100-5107	C/M Multi. 10PF 50V NPO 0402	
357		DC127	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
358	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
359		DC130	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
360	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
361		DC131	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
362	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
363		DC132	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
364	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
365		DC133	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
366	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
367		DC135	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
368	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
369		DC136	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
370	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
371		DC137	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
372	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
373		DC142	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
374	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
375		DC143	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
376	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
377		DC144	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
378	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
379		DC145	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
380	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
381		DC146	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
382	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
383		DC147	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
384	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
385		DC148	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
386	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
387		DC149	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
388	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
389		DC150	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
390	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
391		DC151	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
392	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
393		DC152	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
394	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
395		DC153	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
396	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
397		DC154	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
398	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
399		DC155	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
400	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
401		DC156	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
402	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
403		DC157	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
404	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
405		DC158	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
406	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
407		DC159	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
408	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
409		DC160	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
410	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
411		DC161	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
412	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
413		DC162	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
414	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
415		DC163	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
416	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
417		DC164	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
418	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
419		DC165	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
420	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
421		DC166	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
422	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
423		DC167	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
424	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
425		DC168	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
426	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
427		DC169	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
428	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
429		DC173	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
430	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
431		DC174	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
432	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
433		DC175	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
434	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
435		DC176	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
436	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
437		DC177	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
438	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
439		DC178	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
440	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
441		DC181	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
442	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
443		DC2	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
444	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
445		DC3	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
446	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
447		DC30	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
448	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
449		DC34	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
450	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
451		DC37	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
452	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
453		DC38	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
454	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
455		DC39	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
456	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
457		DC40	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
458	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
459		DC41	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
460	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
461		DC42	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
462	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
463		DC43	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
464	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
465		DC44	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
466	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
467		DC45	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
468	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
469		DC46	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
470	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
471		DC47	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
472	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
473		DC49	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
474	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
475		DC50	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
476	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
477		DC51	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
478	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
479		DC52	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
480	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
481		DC53	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
482	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
483		DC54	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
484	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
485		DC55	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
486	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
487		DC56	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
488	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
489		DC57	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
490	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
491		DC58	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
492	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
493		DC6	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
494	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
495		DC61	0111-3562-5117	C/M Multi. 5600PF 50V X7R K 0402	1
496	SS		0112-3562-5117	C/M Multi. 5600PF 50V X7R K 0402	
497		DC62	0111-3152-5117	C/M Multi. 1500PF 50V X7R 0402	1
498	SS		0112-3152-5117	C/M Multi. 1500PF 50V X7R 0402 L-F	
499		DC63	0111-3152-5117	C/M Multi. 1500PF 50V X7R 0402	1
500	SS		0112-3152-5117	C/M Multi. 1500PF 50V X7R 0402 L-F	
501		DC66	0111-3106-1135	C/M MULTI. 10uF 10V Y5V 0805	1
502	SS		0112-3106-1135	C/M MULTI 10uF 10V Y5V 0805	
503		DC67	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
504	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
505		DC68	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
506	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
507		DC69	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
508	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
509		DC70	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
510	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
511		DC71	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
512	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
513		DC72	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
514	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
515		DC73	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
516	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
517		DC74	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
518	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
519		DC75	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
520	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
521		DC76	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
522	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
523		DC77	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
524	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
525		DC81	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
526	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
527		DC82	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
528	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
529		DC83	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
530	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
531		DC84	0111-3331-5107	C/M Multi. 330PF 50V NPO 0402	1
532	SS		0112-3331-5107	C/M Multi. 330PF 50V NPO J 0402	
533		DC85	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
534	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
535		DC86	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
536	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
537		DC87	0111-3106-1135	C/M MULTI. 10uF 10V Y5V 0805	1
538	SS		0112-3106-1135	C/M MULTI 10uF 10V Y5V 0805	
539		DC88	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
540	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
541		DC89	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
542	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
543		DC90	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
544	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
545		DC91	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
546	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
547		DC92	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
548	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
549		DC93	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
550	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
551		DC94	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
552	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
553		DC95	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
554	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
555		DC96	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
556	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
557		DC98	0111-3106-1135	C/M MULTI. 10uF 10V Y5V 0805	1
558	SS		0112-3106-1135	C/M MULTI 10uF 10V Y5V 0805	
559		DC99	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
560	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
561		DFB7	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
562		DFB9	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
563		DRP17	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
564		DRP18	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
565		DRP22	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
566		DRP23	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
567		DRP7	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
568		DR101	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
569		DR102	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
570		DR103	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
571		DR104	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
572		DR107	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
573		DR121	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
574		DR122	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
575		DR132	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
576		DR133	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
577		DR135	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
578		DR138	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
579		DR139	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
580		DR140	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
581		DR141	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
582		DR142	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
583		DR143	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
584		DR56	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
585		DR58	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
586		DR95	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
587		DR97	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
588		DR98	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
589		FB39	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
590		FB40	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
591		FB41	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
592		FB42	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
593		FB43	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
594		FB44	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
595		FB45	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
596		FB46	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
597		FB47	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
598		FB48	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
599		FB49	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
600		FB5	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
601		FB50	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
602		FB52	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
603		FB53	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
604		FB54	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
605		FB55	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
606		FB56	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
607		FB57	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
608		FB8	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
609		R123	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
610		R330	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
611		R335	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
612		R336	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
613		R337	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
614		R339	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
615		R341	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
616		R342	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
617		R343	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
618		R344	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
619		R346	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
620		R347	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
621		R348	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
622		R349	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
623		R351	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
624		R356	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
625		R359	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
626		R367	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
627		R44	0131-4999-1614	RES. MF 49.9ohm 1/16W F 0402	1
628		R446	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
629		R45	0131-4999-1614	RES. MF 49.9ohm 1/16W F 0402	1
630		R54	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
631		R55	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
632		R59	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
633		R69	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
634		R76	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
635		R82	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
636		R87	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
637		R88	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
638		R89	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
639		R90	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
640		R91	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
641		R92	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
642		R93	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
643		R96	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
644		R98	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
645		R99	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1

363700120150T MAIN BD ASS'Y VX37L HDTV SMD TOP

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0171-2272-2213	PCB MAIN BD FR4 380*168*1.6t 4M (VX37L HDTV)(1:1)	1
2		C1	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
3	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
4		C10	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
5	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
6		C106	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
7	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
8		C107	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
9	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
10		C108	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
11	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
12		C109	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
13	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
14		C11	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
15	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
16		C110	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
17	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
18		C111	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
19	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
20		C112	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
21	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
22		C114	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
23	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
24		C115	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
25	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
26		C116	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
27	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
28		C117	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
29	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
30		C118	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
31	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
32		C119	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
33	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
34		C12	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
35	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
36		C120	0111-3332-5117	C/M Multi. 3300PF 50V X7R K 0402	1
37	SS		0112-3332-5117	C/M Multi. 3300PF 50V X7R K 0402 L-F	
38		C129	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
39	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
40		C13	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
41	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
42		C132	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
43	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44		C139	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
45	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
46		C15	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
47	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
48		C159	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
49	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
50		C16	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
51	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
52		C163	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
53	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
54		C164	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
55	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
56		C165	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
57	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
58		C166	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
59	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
60		C167	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
61	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
62		C168	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
63	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
64		C169	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
65	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
66		C17	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
67	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
68		C170	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
69	SS		0112-3821-5117	C/M Multi. 820pF 50V X7R 0402 L-F	
70		C173	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
71	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
72		C176	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
73	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
74		C178	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
75	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
76		C18	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
77	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
78		C182	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
79	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
80		C183	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
81	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
82		C185	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
83	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
84		C19	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
85	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
86		C193	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
87	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
88		C195	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
89	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
90		C198	0111-3331-5107	C/M Multi. 330PF 50V NPO 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
91	SS		0112-3331-5107	C/M Multi. 330PF 50V NPO J 0402	
92		C199	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
93	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
94		C2	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
95	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
96		C20	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
97	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
98		C204	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
99	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
100		C205	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
101	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
102		C209	0111-3189-5107	C/M MULTI 1.8PF 50V NPO 0402	1
103	SS		0112-3189-5107	C/M MULTI 1.8PF 50V NPO 0402	
104		C21	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
105	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
106		C213	0130-2203-1654	RES. CF 220Kohm 1/16W J 0402	1
107		C215	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
108	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
109		C216	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
110	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
111		C217	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
112	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
113		C218	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
114	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
115		C219	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
116	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
117		C22	0111-3106-1135	C/M MULTI. 10uF 10V Y5V 0805	1
118	SS		0112-3106-1135	C/M MULTI 10uF 10V Y5V 0805	
119		C220	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
120	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
121		C221	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
122	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
123		C232	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
124	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
125		C233	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
126	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
127		C234	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
128	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
129		C237	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
130	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
131		C239	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
132	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
133		C240	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
134	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
135		C241	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
136	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
137		C242	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
138	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
139		C244	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
140	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
141		C245	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
142	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
143		C246	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
144	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
145		C248	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
146	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
147		C249	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
148	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
149		C250	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
150	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
151		C253	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
152	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
153		C254	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
154	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
155		C255	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
156	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
157		C256	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
158	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
159		C257	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
160	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
161		C258	0111-3331-5107	C/M Multi. 330PF 50V NPO 0402	1
162	SS		0112-3331-5107	C/M Multi. 330PF 50V NPO J 0402	
163		C259	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
164	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
165		C260	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
166	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
167		C261	0111-3331-5107	C/M Multi. 330PF 50V NPO 0402	1
168	SS		0112-3331-5107	C/M Multi. 330PF 50V NPO J 0402	
169		C262	0111-3331-5107	C/M Multi. 330PF 50V NPO 0402	1
170	SS		0112-3331-5107	C/M Multi. 330PF 50V NPO J 0402	
171		C263	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
172	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
173		C264	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
174	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
175		C265	0111-3472-5117	C/M Multi. 4700PF 50V X7R K 0402	1
176	SS		0112-3472-5117	C/M Multi. 4700PF 50V X7R K 0402 L-F	
177		C266	0111-3472-5117	C/M Multi. 4700PF 50V X7R K 0402	1
178	SS		0112-3472-5117	C/M Multi. 4700PF 50V X7R K 0402 L-F	
179		C267	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
180	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
181		C268	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
182	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
183		C269	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
184	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
185		C270	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
186	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
187		C271	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
188	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
189		C272	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
190	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
191		C273	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
192	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
193		C274	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
194	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
195		C275	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
196	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
197		C276	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
198	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
199		C277	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
200	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
201		C278	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
202	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
203		C279	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
204	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
205		C280	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
206	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
207		C283	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
208	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
209		C284	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
210	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
211		C285	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
212	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
213		C286	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
214	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
215		C287	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
216	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
217		C288	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
218	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
219		C290	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
220	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
221		C292	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
222	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
223		C293	0111-3472-5117	C/M Multi. 4700PF 50V X7R K 0402	1
224	SS		0112-3472-5117	C/M Multi. 4700PF 50V X7R K 0402 L-F	
225		C294	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
226	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
227		C296	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
228	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
229		C297	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
230	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
231		C299	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
232	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
233		C3	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
234	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
235		C300	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
236	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
237		C301	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
238	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
239		C302	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
240	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
241		C303	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
242	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
243		C304	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
244	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
245		C305	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
246	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
247		C306	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
248	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
249		C307	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
250	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
251		C308	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
252	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
253		C309	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
254	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
255		C310	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
256	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
257		C311	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
258	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
259		C312	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
260	SS		0112-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603 L-F	
261		C313	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
262	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
263		C314	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
264	SS		0112-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603 L-F	
265		C316	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
266	SS		0112-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603 L-F	
267		C317	0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
268	SS		0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
269		C318	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
270	SS		0112-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603 L-F	
271		C319	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
272	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
273		C320	0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
274	SS		0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
275		C323	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
276	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
277		C325	0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
278	SS		0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
279		C326	0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
280	SS		0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
281		C330	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
282	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
283		C332	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
284	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
285		C336	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
286	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
287		C341	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
288	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
289		C342	0112-3475-1635	C/M MULTI 4.7uF 16V Y5V 0805 L-F	1
290		C343	0112-3475-1635	C/M MULTI 4.7uF 16V Y5V 0805 L-F	1
291	SS		0111-3475-1635	C/M MULTI 4.7uF 16V Y5V Z 0805	
292		C347	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
293	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
294		C348	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
295	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
296		C349	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
297	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
298		C350	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
299	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
300		C355	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
301	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
302		C356	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
303	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
304		C359	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
305	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
306		C363	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
307	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
308		C364	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
309	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
310		C365	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
311	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
312		C366	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
313	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
314		C375	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
315	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
316		C382	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
317	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
318		C392	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
319	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
320		C396	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
321	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
322		C397	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
323	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
324		C398	0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
325	SS		0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
326		C399	0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
327	SS		0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
328		C40	0112-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603	1
329	SS		0111-3475-6056	C/M MULTI 4.7uF 6.3V X5R K 0603 L-F	
330		C400	0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
331	SS		0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
332		C41	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
333	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
334		C5	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
335	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
336		C6	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
337	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
338		C7	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
339	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
340		C8	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
341	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
342		C82	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
343	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
344		C83	0111-3270-5107	C/M MULTI 27PF 50V NPO 0402	1
345	SS		0112-3270-5107	C/M Multi. 27PF 50V NPO 5% 0402	
346		C9	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
347	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
348		DC1	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
349	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
350		DC10	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
351	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
352		DC11	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
353	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
354		DC111	0111-3100-5107	C/M Multi. 10PF 50V NPO J 0402	1
355	SS		0112-3100-5107	C/M Multi. 10PF 50V NPO 0402	
356		DC113	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
357	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
358		DC120	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
359	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
360		DC128	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
361	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
362		DC129	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
363	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
364		DC134	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
365	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
366		DC138	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
367	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
368		DC139	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
369	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
370		DC14	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
371	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
372		DC140	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
373	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
374		DC141	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
375	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
376		DC15	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
377	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
378		DC16	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
379	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
380		DC170	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
381	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
382		DC171	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
383	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
384		DC172	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
385	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
386		DC179	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
387	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
388		DC180	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
389	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
390		DC182	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
391	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
392		DC183	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
393	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
394		DC184	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
395	SS		0112-3104-5166	C/M Muitl. 0.1uF 50V X7R J 0603	
396		DC185	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
397	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
398		DC186	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
399	SS		0112-3104-5166	C/M Muitl. 0.1uF 50V X7R J 0603	
400		DC19	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
401	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
402		DC20	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
403	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
404		DC21	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
405	SS		0112-3104-5166	C/M Muitl. 0.1uF 50V X7R J 0603	
406		DC22	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
407	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
408		DC23	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
409	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
410		DC24	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
411	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
412		DC25	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
413	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
414		DC26	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
415	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
416		DC27	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
417	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
418		DC29	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
419	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
420		DC31	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
421	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
422		DC32	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
423	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
424		DC33	0111-3106-1135	C/M MULTI. 10uF 10V Y5V 0805	1
425	SS		0112-3106-1135	C/M MULTI 10uF 10V Y5V 0805	
426		DC35	0111-3180-5107	C/M Multi. 18PF 50V NPO 0402	1
427	SS		0112-3180-5107	C/M Multi. 18PF 50V NPO 0402	
428		DC36	0111-3180-5107	C/M Multi. 18PF 50V NPO 0402	1
429	SS		0112-3180-5107	C/M Multi. 18PF 50V NPO 0402	
430		DC4	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
431	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
432		DC48	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
433	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
434		DC5	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
435	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
436		DC59	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
437	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
438		DC7	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
439	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
440		DC78	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
441	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
442		DC79	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
443	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
444		DC8	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
445	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
446		DC80	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
447	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
448		DC9	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
449	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
450		DC97	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
451	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
452		DD1	0390-6005-5293	SCHOTTKY DIODE 3A 40V B340A-13-F SMA L-F	1
453		DD2	0390-6005-5293	SCHOTTKY DIODE 3A 40V B340A-13-F SMA L-F	1
454		DFB1	0371-6880-0482	CHIP COIL 0.68uH 300mA 0805 (GL201209TR68KTM) LF	1
455		DFB10	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
456		DFB2	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
457		DFB3	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
458		DFB4	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
459		DFB5	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
460		DFB6	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
461		DFB8	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
462		DL10	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
463		DL12	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
464		DL13	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
465		DL14	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
466		DL15	0390-6005-2103	SCHOTTKY DIODE 0.5A/40V MBR0540T1G SOD-123 LF	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
467		DL16	0360-1000-0420	POWER INDUCTOR L:10uH 1.44A 5.8x5.2mm SMD LF	1
468		DL2	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
469		DL3	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
470		DL4	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
471		DL5	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
472		DL6	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
473		DL9	0130-1808-1858	RES. CF 1.8ohm 1/8W J 0805	1
474		DRN25	0141-1001-3851	ARRAY RES. A(X) 1Kohm 4R J 8P	1
475		DRP1	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
476		DRP10	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
477		DRP11	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
478		DRP12	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
479		DRP13	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
480		DRP14	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
481		DRP15	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
482		DRP16	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
483		DRP19	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
484		DRP2	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
485		DRP20	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
486		DRP21	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
487		DRP24	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
488		DRP25	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
489		DRP26	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
490		DRP27	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
491		DRP3	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
492		DRP4	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
493		DRP5	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
494		DRP6	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
495		DRP8	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
496		DRP9	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
497		DR1	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
498		DR10	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
499		DR100	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
500		DR106	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
501		DR11	0130-1501-1654	RES. CF 1.5Kohm 1/16W J 0402	1
502		DR110	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
503		DR111	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
504		DR112	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
505		DR113	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
506		DR114	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
507		DR115	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
508		DR116	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
509		DR117	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
510		DR118	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
511		DR119	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
512		DR12	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
513		DR120	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
514		DR123	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
515		DR124	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
516		DR125	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
517		DR126	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
518		DR127	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
519		DR128	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
520		DR129	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
521		DR13	0130-1801-1654	RES. CF 1.8Kohm 1/16W J 0402	1
522		DR130	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
523		DR131	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
524		DR134	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
525		DR137	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
526		DR14	0130-1501-1654	RES. CF 1.5Kohm 1/16W J 0402	1
527		DR144	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
528		DR145	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
529		DR146	0131-6341-1614	RES. MF 6.34 Kohm 1/16W F 0402	1
530		DR147	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
531		DR15	0130-1201-1654	RES. CF 1.2Kohm 1/16W J 0402	1
532		DR16	0130-1809-1654	RES. CF 18ohm 1/16W J 0402	1
533		DR18	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
534		DR21	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
535		DR23	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
536		DR24	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
537		DR25	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
538		DR27	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
539		DR28	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
540		DR31	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
541		DR32	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
542		DR33	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
543		DR35	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
544		DR36	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
545		DR37	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
546		DR38	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
547		DR39	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
548		DR4	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
549		DR40	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
550		DR41	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
551		DR42	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
552		DR43	0130-1004-1654	RES. CF 1Mohm 1/16W J 0402	1
553		DR44	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
554		DR5	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
555		DR52	0130-8201-1654	RES. CF 8.2Kohm 1/16W J 0402	1
556		DR53	0130-5109-1654	RES. CF 51ohm 1/16W J 0402	1
557		DR55	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
558		DR57	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
559		DR59	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
560		DR6	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
561		DR60	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
562		DR61	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
563		DR7	0130-1801-1654	RES. CF 1.8Kohm 1/16W J 0402	1
564		DR8	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
565		DR9	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
566		DR99	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
567		DU14	0430-3039-4645	IC MX29LV320CTTC-70G 48PIN TSOP LF	1
568		DU15	0430-7031-9603	IC DDR 16Mx16 NT5DS16M16CS-5T 66PIN TSOPII LF	1
569		DU16	0430-7031-9603	IC DDR 16Mx16 NT5DS16M16CS-5T 66PIN TSOPII LF	1
570		DU17	0430-6010-9028	IC G2996F1Uf 8PIN SOP-8(FD) LF	1
571		DU18	0430-6015-8079	IC DC/DC CONVERTER AP1522WA SOT23-5 5PIN LF	1
572		DU2	0430-6007-5079	IC AP1117E33LA LF SOT-223	1
573	SS		0430-6007-5075	IC AME1117CCGTZ 3PIN SOT-223 L-F	
574		DU3	0430-6002-8079	IC AP1117E25LA SOT-223 L-F	1
575		DU4	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
576		DU5	0430-6015-5079	IC STEP DOWN CONVERTER AP1513SA SOP 8PIN LF	1
577		DU6	0430-6015-5079	IC STEP DOWN CONVERTER AP1513SA SOP 8PIN LF	1
578		DU7	0430-7043-5092	IC SWITCH PI5C3257QE QSOP 16PIN LF	1
579	SS		0430-3039-9046	IC ADG3257BRQZ-REEL7 16PIN QSOP LF	
580		DU8	0430-7043-1999	IC DEMODULATOR MT5112BD LQFP 100PIN LF	1
581		DU9	0430-7035-1999	IC MT5351AG 471PIN BGA LF	1
582		DX1	0286-2700-0024	OSC 27MHz 25ppm 3.3V SMD VCXO	1
583		D1	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
584	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
585	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
586		D10	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
587	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
588	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
589		D11	0390-5003-5293	DUAL SURFACE DIODES BAV99-7-F SOT-23 L-F	1
590	SS		0390-5003-5273	DUAL SURFACE DIODE BAV99 SMD (SOT-23) L-F	
591		D12	0390-5003-5293	DUAL SURFACE DIODES BAV99-7-F SOT-23 L-F	1
592	SS		0390-5003-5273	DUAL SURFACE DIODE BAV99 SMD (SOT-23) L-F	
593		D13	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
594	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
595	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
596		D14	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
597	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
598	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
599		D15	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
600	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
601	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
602		D16	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
603	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
604	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
605		D17	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
606	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
607	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
608		D18	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
609	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
610	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
611		D2	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
612	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
613	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
614		D21	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
615	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
616	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
617		D22	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
618	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
619	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
620		D3	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
621	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
622	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
623		D4	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
624	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
625	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
626		D5	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
627	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
628	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
629		D6	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
630	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
631	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
632		D9	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
633	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
634	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
635		FB1	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
636		FB10	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
637		FB11	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
638		FB12	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
639		FB13	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
640		FB14	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
641		FB15	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
642		FB16	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
643		FB17	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
644		FB19	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
645		FB22	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
646		FB23	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
647		FB24	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
648		FB25	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
649		FB26	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
650		FB27	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
651		FB28	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
652		FB29	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
653		FB3	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
654		FB30	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
655		FB31	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
656		FB32	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
657		FB33	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
658		FB34	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
659		FB37	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
660		FB4	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
661		FB51	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
662		FB58	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
663		FB59	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
664		FB6	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
665		FB60	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
666		FB61	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
667		FB9	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
668		F1	0185-1502-0073	FUSE 125V/5A SMD (R45105) L-F	1
669		F2	0185-1302-0073	FUSE 125V/3A SMD (R451003) LF	1
670		J5	0302-2000-2306	CONN MALE R/A 30P SMD (MS240430G) L-F	1
671		LG13	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
672		LG14	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
673		LG15	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
674		LG16	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
675		L10	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
676		L11	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
677		L12	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
678		L13	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
679		L14	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
680		L15	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
681		L16	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
682		L17	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
683		L18	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
684		L19	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
685		L20	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
686		L21	0130-4700-0055	RES. CF 470ohm 1/10W J 0603	1
687		L22	0130-4700-0055	RES. CF 470ohm 1/10W J 0603	1
688		L23	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
689		L24	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
690		L7	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
691		L8	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
692		L9	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
693		P10	0304-1000-0113	CONN HDMI 19P 90' SMD With Flange (392M19-H58) L-F	1
694		P11	0304-1000-0113	CONN HDMI 19P 90' SMD With Flange (392M19-H58) L-F	1
695		Q1	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
696	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
697	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
698		Q10	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
699	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
700	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
701		Q11	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
702	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
703	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
704		Q12	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
705	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
706	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
707		Q13	0420-1004-9621	MOSFET N-CH 2N7002E-T1-E3 SMD (SOT-23) L-F	1
708	SS		0420-1004-9610	MOSFET N-CH 2N7002LT1G 60V 115mA SMD (SOT-23) LF	
709	SS		0420-1004-9611	MOSFET N-CH 2N7002 SMD (SOT-23) LF	
710		Q14	0420-1004-9621	MOSFET N-CH 2N7002E-T1-E3 SMD (SOT-23) L-F	1
711	SS		0420-1004-9610	MOSFET N-CH 2N7002LT1G 60V 115mA SMD (SOT-23) LF	
712	SS		0420-1004-9611	MOSFET N-CH 2N7002 SMD (SOT-23) LF	
713		Q15	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
714	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
715	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
716		Q16	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
717	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
718	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
719		Q18	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
720	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
721	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
722		Q19	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
723	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
724	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
725		Q20	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
726	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
727	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
728		Q21	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
729	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
730	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
731		Q22	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1
732	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
733		Q23	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
734	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
735	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
736		Q24	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
737	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
738	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
739		Q25	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
740	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
741	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
742		Q27	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
743	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
744	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
745		Q28	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
746	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
747	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
748		Q29	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
749	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
750	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
751		Q3	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
752	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
753	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
754		Q31	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
755	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
756	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
757		Q32	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
758	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
759	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
760		Q33	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
761	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
762	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
763		Q35	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1
764	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
765		Q36	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1
766	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
767		Q4	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
768	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
769	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
770		Q5	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
771	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
772	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
773		Q6	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
774	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
775	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
776		Q7	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
777	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
778	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
779		Q8	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
780	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
781	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
782		Q9	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
783	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
784	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
785		RP1	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
786		RP10	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
787		RP11	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
788		RP12	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
789		RP13	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
790		RP14	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
791		RP15	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
792		RP16	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
793		RP17	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
794		RP18	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
795		RP19	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
796		RP2	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
797		RP20	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
798		RP21	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
799		RP22	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
800		RP23	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
801		RP24	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
802		RP25	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
803		RP26	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
804		RP27	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
805		RP28	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
806		RP29	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
807		RP3	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
808		RP30	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
809		RP31	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
810		RP35	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
811		RP36	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
812		RP37	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
813		RP38	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
814		RP39	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
815		RP4	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
816		RP40	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
817		RP41	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
818		RP5	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
819		RP6	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
820		RP7	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
821		RP8	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
822		RP9	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
823		R1	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
824		R10	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
825		R100	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
826		R101	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
827		R104	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
828		R105	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
829		R106	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
830		R107	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
831		R108	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
832		R109	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
833		R11	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
834		R110	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
835		R111	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
836		R112	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
837		R113	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
838		R114	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
839		R115	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
840		R116	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
841		R117	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
842		R118	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
843		R119	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
844		R12	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
845		R120	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
846		R127	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
847		R128	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
848		R129	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
849		R13	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
850		R130	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
851		R131	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
852		R132	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
853		R133	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
854		R134	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
855		R136	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
856		R137	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
857		R138	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
858		R139	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
859		R140	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
860		R141	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
861		R142	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
862		R143	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
863		R146	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
864		R147	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
865		R148	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
866		R149	0130-3302-1654	RES. CF 33Kohm 1/16W J 0402	1
867		R15	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
868		R150	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
869		R151	0130-2702-1654	RES. CF 27Kohm 1/16W J 0402	1
870		R152	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
871		R153	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
872		R154	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
873		R158	0130-8201-1654	RES. CF 8.2Kohm 1/16W J 0402	1
874		R16	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
875		R163	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
876		R164	0130-3902-1654	RES. CF 39 Kohm 1/16W J 0402	1
877		R165	0130-1809-1654	RES. CF 18ohm 1/16W J 0402	1
878		R166	0130-5609-1654	RES. CF 56ohm 1/16W J 0402	1
879		R167	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
880		R168	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
881		R169	0130-1809-1654	RES. CF 18ohm 1/16W J 0402	1
882		R17	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
883		R171	0130-5609-1654	RES. CF 56ohm 1/16W J 0402	1
884		R172	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
885		R173	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
886		R174	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
887		R175	0131-7509-1614	RES. MF 75ohm 1/16W F 0402	1
888		R176	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
889		R177	0131-7509-1614	RES. MF 75ohm 1/16W F 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
890		R178	0131-7509-1614	RES. MF 75ohm 1/16W F 0402	1
891		R18	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
892		R182	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
893		R183	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
894		R184	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
895		R185	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
896		R186	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
897		R187	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
898		R188	0131-7509-1614	RES. MF 75ohm 1/16W F 0402	1
899		R189	0131-7509-1614	RES. MF 75ohm 1/16W F 0402	1
900		R190	0131-7509-1614	RES. MF 75ohm 1/16W F 0402	1
901		R191	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
902		R192	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
903		R193	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
904		R194	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
905		R195	0130-2702-1654	RES. CF 27Kohm 1/16W J 0402	1
906		R196	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
907		R198	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
908		R199	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
909		R2	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
910		R20	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
911		R200	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
912		R201	0130-5101-1654	RES. CF 5.1Kohm 1/16W J 0402	1
913		R202	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
914		R203	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
915		R204	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
916		R205	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
917		R206	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
918		R207	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
919		R208	0131-7509-1614	RES. MF 75ohm 1/16W F 0402	1
920		R209	0131-7509-1614	RES. MF 75ohm 1/16W F 0402	1
921		R21	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
922		R210	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
923		R211	0130-2702-1654	RES. CF 27Kohm 1/16W J 0402	1
924		R212	0130-6802-1654	RES. CF 68Kohm 1/16W J 0402	1
925		R213	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
926		R214	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
927		R215	0130-5101-1654	RES. CF 5.1Kohm 1/16W J 0402	1
928		R216	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
929		R217	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
930		R218	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
931		R219	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
932		R220	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
933		R221	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
934		R222	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
935		R223	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
936		R224	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
937		R225	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
938		R226	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
939		R227	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
940		R228	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
941		R229	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
942		R23	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
943		R230	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
944		R231	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
945		R232	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
946		R233	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
947		R234	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
948		R235	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
949		R236	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
950		R237	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
951		R238	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
952		R239	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
953		R24	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
954		R240	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
955		R241	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
956		R242	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
957		R243	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
958		R244	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
959		R245	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
960		R246	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
961		R247	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
962		R248	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
963		R249	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
964		R25	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
965		R250	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
966		R251	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
967		R252	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
968		R253	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
969		R254	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
970		R255	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
971		R256	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
972		R257	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
973		R258	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
974		R259	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
975		R26	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
976		R260	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
977		R261	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
978		R262	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
979		R263	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
980		R264	0130-1800-1654	RES. CF 180ohm 1/16W J 0402	1
981		R265	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
982		R266	0130-6803-1654	RES. CF 680Kohm 1/16W J 0402	1
983		R267	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
984		R268	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
985		R269	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
986		R27	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
987		R270	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402	1
988		R271	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
989		R272	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
990		R273	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
991		R274	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
992		R275	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
993		R276	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
994		R277	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402	1
995		R278	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
996		R279	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
997		R28	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
998		R280	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402	1
999		R281	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1000		R282	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1001		R283	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1002		R284	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1003		R285	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1004		R286	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1005		R287	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
1006		R288	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
1007		R289	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
1008		R29	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1009		R290	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1010		R291	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1011		R292	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1012		R293	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1013		R294	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1014		R295	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1015		R296	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1016		R297	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1017		R298	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1018		R299	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1019		R3	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1020		R30	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1021		R300	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1022		R301	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1023		R302	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1024		R303	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1025		R304	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1026		R305	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805	1
1027		R306	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805	1
1028		R307	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1029		R309	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805	1
1030		R31	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1031		R310	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1032		R313	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1033		R314	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
1034		R315	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1035		R316	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1036		R319	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805	1
1037		R321	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1038		R322	0131-1100-1614	RES. MF 110ohm 1/16W F 0402	1
1039		R323	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1040		R324	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1041		R327	0131-2219-1614	RES. MF 22.1 ohm 1/16W F 0402	1
1042		R328	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1043		R329	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1044		R33	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
1045		R332	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1046		R333	0130-1801-1654	RES. CF 1.8Kohm 1/16W J 0402	1
1047		R334	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1048		R338	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1049		R34	0130-5609-1654	RES. CF 56ohm 1/16W J 0402	1
1050		R340	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1051		R350	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1052		R352	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
1053		R354	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1054		R355	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1055		R357	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1056		R358	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1057		R36	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1058		R360	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1059		R361	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
1060		R362	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
1061		R363	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1062		R364	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1063		R365	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1064		R366	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
1065		R368	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
1066		R369	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
1067		R370	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
1068		R373	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
1069		R374	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
1070		R375	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
1071		R376	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
1072		R378	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1073		R38	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
1074		R380	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1075		R381	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1076		R383	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1077		R386	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1078		R387	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1079		R388	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1080		R389	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1081		R390	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1082		R391	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1083		R392	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1084		R393	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1085		R394	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1086		R395	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
1087		R396	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1088		R397	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1089		R398	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1090		R40	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1091		R402	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1092		R408	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1093		R410	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1094		R411	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1095		R412	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1096		R413	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1097		R414	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1098		R415	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1099		R416	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1100		R417	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1101		R419	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
1102		R42	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1103		R421	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1104		R423	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1105		R424	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1106		R426	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1107		R427	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1108		R428	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
1109		R429	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1110		R43	0130-8200-1654	RES. CF 820ohm 1/16W J 0402	1
1111		R432	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1112		R433	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
1113		R434	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
1114		R443	0130-1501-1654	RES. CF 1.5Kohm 1/16W J 0402	1
1115		R444	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
1116		R445	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1117		R449	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1118		R450	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1119		R451	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1120		R452	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1121		R453	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1122		R454	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1123		R46	0131-4999-1614	RES. MF 49.9ohm 1/16W F 0402	1
1124		R47	0131-4999-1614	RES. MF 49.9ohm 1/16W F 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1125		R48	0130-8203-1654	RES. CF 820Kohm 1/16W J 0402	1
1126		R49	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
1127		R5	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1128		R50	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1129		R51	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1130		R56	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1131		R57	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1132		R58	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1133		R6	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1134		R60	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1135		R61	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1136		R62	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1137		R63	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1138		R64	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1139		R65	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1140		R66	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1141		R67	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1142		R68	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1143		R7	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
1144		R70	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
1145		R71	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1146		R72	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1147		R73	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1148		R74	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1149		R75	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1150		R77	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1151		R78	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1152		R79	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1153		R8	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1154		R80	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
1155		R81	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
1156		R83	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
1157		R85	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1158		R86	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1159		R9	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
1160		R94	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1161		R95	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
1162		R97	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
1163		U1	0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	1
1164	SS		0420-2004-9629	MOSFET P-CH 5A 30V AP4953GM SO-8 LF	
1165		U10	0430-6005-5079	IC AP1117E18LA LF SOT-223	1
1166	SS		0430-6009-7075	IC AME1117ECGTZ 1.8V 3PIN SOT-223 L-F	
1167		U11	0430-7042-8999	IC SCALER MT8202AG/BD-L BGA 388PIN LF	1
1168		U12	0430-3039-3645	IC MX29LV160CTTC-70G 48PIN TSOP LF	1
1169		U12X	0991-2002-9600	SOFTWARE VX37L HDTV CPU:VX37LMM00.bin	1
1170		U13	0430-7037-4629	IC DDR 8Mx16 V58C2128164SBI5 66PIN TSOP-II LF	1
1171		U14	0430-7037-4629	IC DDR 8Mx16 V58C2128164SBI5 66PIN TSOP-II LF	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1172		U15	0430-6010-9028	IC G2996F1Uf 8PIN SOP-8(FD) LF	1
1173		U16	0430-6002-8079	IC AP1117E25LA SOT-223 L-F	1
1174		U17	0430-3006-9011	IC AT24C04N-10SU-2.7 SO-8 L-F	1
1175		U18	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
1176		U19	0430-7041-6999	IC HDMI CINEMA RECEIVER MT8293AE-L 128Pin QFP LF	1
1177		U2	0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	1
1178	SS		0420-2004-9629	MOSFET P-CH 5A 30V AP4953GM SO-8 LF	
1179		U20	0430-3039-6011	IC AT24C02BN-10SU-1.8 8Pin SOIC L-F	1
1180		U21	0430-1010-9088	IC DUAL OP AMP NJM4558M-TE3_PB SO8(DMP8) L-F	1
1181		U22	0430-0001-8015	IC CD4052BNSR 16PIN SOP16 L-F	1
1182		U23	0430-7027-3699	IC WM8776SEFT 48PIN TQFP L-F	1
1183		U27	0430-6015-6099	IC RESET STL8110GCL438 4.38V SOT-23 3PIN LF	1
1184		U28	0430-3004-3011	IC AT24C16AN-10SU-2.7 SO-8 L-F	1
1185		U29	0430-0001-8015	IC CD4052BNSR 16PIN SOP16 L-F	1
1186		U3	0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	1
1187	SS		0420-2004-9629	MOSFET P-CH 5A 30V AP4953GM SO-8 LF	
1188		U30	0430-1010-8615	IC TTL LOGIC CD74HC157M96 SOIC 16PIN LF	1
1189		U31	0430-7044-1092	IC SWITCH PI3HDMI412FTZHE TQFN 42PIN LF	1
1190		U32	0430-3039-6011	IC AT24C02BN-10SU-1.8 8Pin SOIC L-F	1
1191		U33	0430-7043-5092	IC SWITCH PI5C3257QE QSOP 16PIN LF	1
1192	SS		0430-3039-9046	IC ADG3257BRQZ-REEL7 16PIN QSOP LF	
1193		U34	0430-3039-6011	IC AT24C02BN-10SU-1.8 8Pin SOIC L-F	1
1194		U4	0430-6007-5079	IC AP1117E33LA LF SOT-223	1
1195	SS		0430-6007-5075	IC AME1117CCGTZ 3PIN SOT-223 L-F	
1196		U5	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
1197		U6	0430-6007-5079	IC AP1117E33LA LF SOT-223	1
1198	SS		0430-6007-5075	IC AME1117CCGTZ 3PIN SOT-223 L-F	
1199		U7	0430-6005-5079	IC AP1117E18LA LF SOT-223	1
1200	SS		0430-6009-7075	IC AME1117ECGTZ 1.8V 3PIN SOT-223 L-F	
1201		U8	0430-6007-5079	IC AP1117E33LA LF SOT-223	1
1202	SS		0430-6007-5075	IC AME1117CCGTZ 3PIN SOT-223 L-F	
1203		U9	0430-6005-5079	IC AP1117E18LA LF SOT-223	1
1204	SS		0430-6009-7075	IC AME1117ECGTZ 1.8V 3PIN SOT-223 L-F	
1205		ZD1	0400-0601-5012	ZENER 6.06~6.33V UDZSTE-176.2BB 1/5W SOD-323	1
1206		ZD2	0400-0941-2012	ZENER RLZ-10B 9.41~9.90V 1/2W LL-34 L-F	1

VIZIO VX37L HDTV 機種 BOM 差異比較表

料號	規格說明	9637-8500-2053 (FOR LG PANEL)	9637-8500-1143 (FOR AUO PANEL)	單位
0211-0370-1677	LCD MODULE 37.0" TFT T370XW02 V0 (AUO)		1	EA
0211-0370-1861	LCD MODULE 37.0" LC370WX1-SLA1 (LG.PHILIPS)(Korea)	1		ST
0460-1012-0281	WH A2001H02-12P/A2543H00-12P 1007#24 410mm	1		ST
0460-1014-0090	WH A2001H02-14P/A2543H02-12P 1061#24/1007#24 650mm		1	EA
0460-1014-0150	WH A2001H02-14P/A2543H00-12P 1007#24 650mm	1		SR
0460-3430-0940	WH FI-X30C2EL/P240430 20276 480mm CORE+SRA-51T-4		1	EA
0460-3430-0971	WH P240430/FI-X30HL 20276#30 480mm + GND	1		EA
0460-4012-0150	WH A2543H12P-A2001H02-10P 1007#24 650mm		1	EA
1701-1932-0010	SIDE JACK COVER (VX37L HDTV)(ABS)		1	EA
1701-1933-1010	Side Jack Cover(VX37L-LPL)(ABS)	1		EA
1712-0101-0490	CHASSIS (VX37L HDTV)		1	EA
1712-0101-0520	PANEL HOLDER_L (VX37L HDTV)		1	EA
1712-0101-0530	PANEL HOLDER_R (VX37L HDTV)		1	EA
1712-0101-1120	CHASSIS FOR (VX37L-LPL)	1		EA
1712-0101-1130	PANEL HOLDER-L (VX37L-LPL)	1		EA
1712-0101-1140	PANEL HOLDER-R (VX37L-LPL)	1		EA
1720-1504-0820	MAC. SCREW-MPSWF M4.0*8.0L,NI	16	26	EA
1801-0214-8010	REAR COVER (VX37L HDTV)(ABS) ASS'Y		1	EA
1801-0214-8020	REAR COVER (VX37L-LPL)(ABS) ASS'Y	1		EA
1947-1200-0310	ACETATE CLOTH TAPE (醋酸布膠帶) 27*75mm		3	EA
1947-1200-0400	ACETATE CLOTH TAPE (醋酸布膠帶) 20*45mm	17	14	EA

料　　號	規　　格　　說　　明	9637-8500-2053 (FOR LG PANEL)	9637-8500-1143 (FOR AUO PANEL)	單　　位
1947-1200-3710	MYLAR 3.5*10*120(VX37L)		1	EA
1947-1200-3720	MYLAR 3.5*10*60(VX37L)		1	EA
1947-1700-0130	SHIELDING AL.TAPE (70.0*50.0)	4	3	EA
1947-1700-0290	SHIELDING AL. TAPE (50.0W*100.0L)		1	EA
1947-1800-1090	GASKET BLOCK (17.0W*100.0L*25.0H)(VX37L)	9	8	EA
3637-0012-0331	PANEL ASS'Y VX37L HDTV(AUO,T370XW02-V0) Black		1	EA
3637-0022-0331	PANEL ASS'Y VX37L HDTV(LG,LC370WX1-SLA1) Black	1		EA

******** 資 料 結 束 ********